VOLUME XLIX NUMBER FIVE

The NATIONAL GEOGRAPHIC MAGAZINE

MAY, 1926

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THE Society also is maintaining expeditions in the unknown area adjacent to the San Juan River in southeastern Utah, and in Yunnan, Kweichow, and Kansu, China—all regions virgin to scientific study.

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SUPPLEMENT, MAY, 1926

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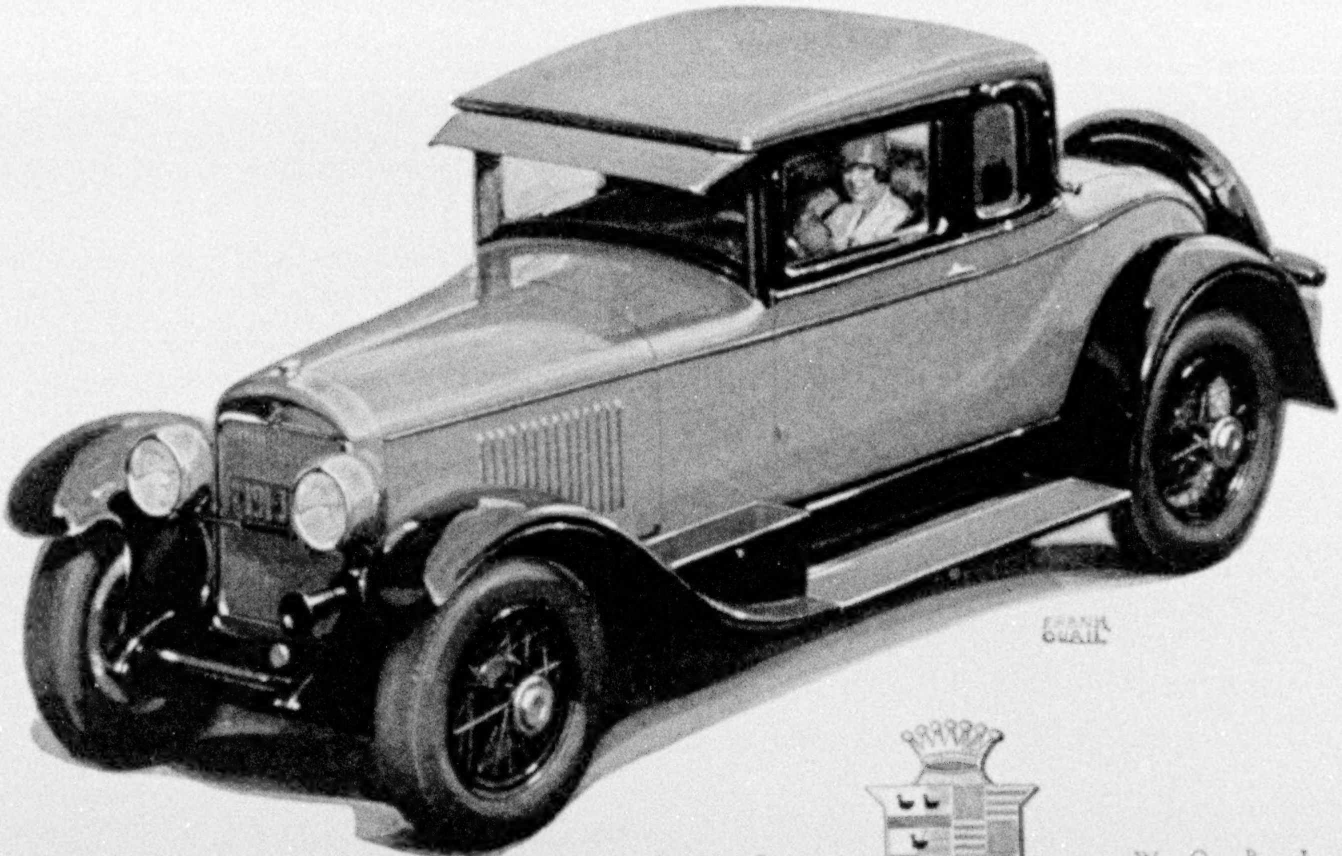

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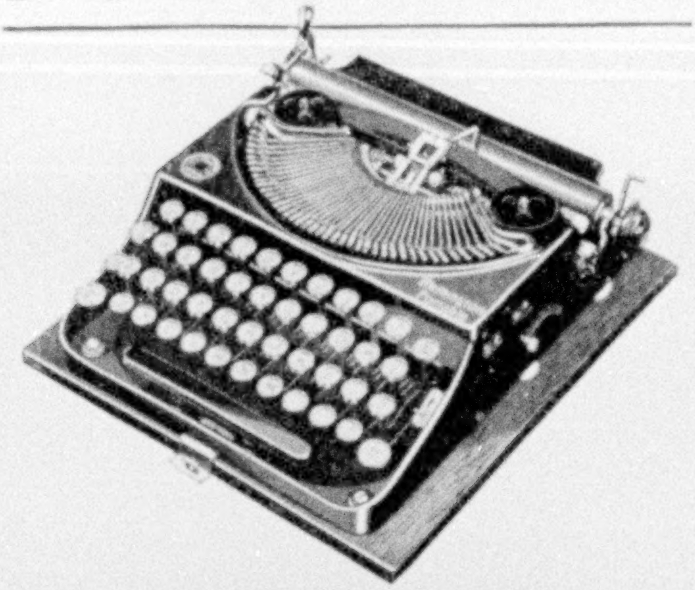

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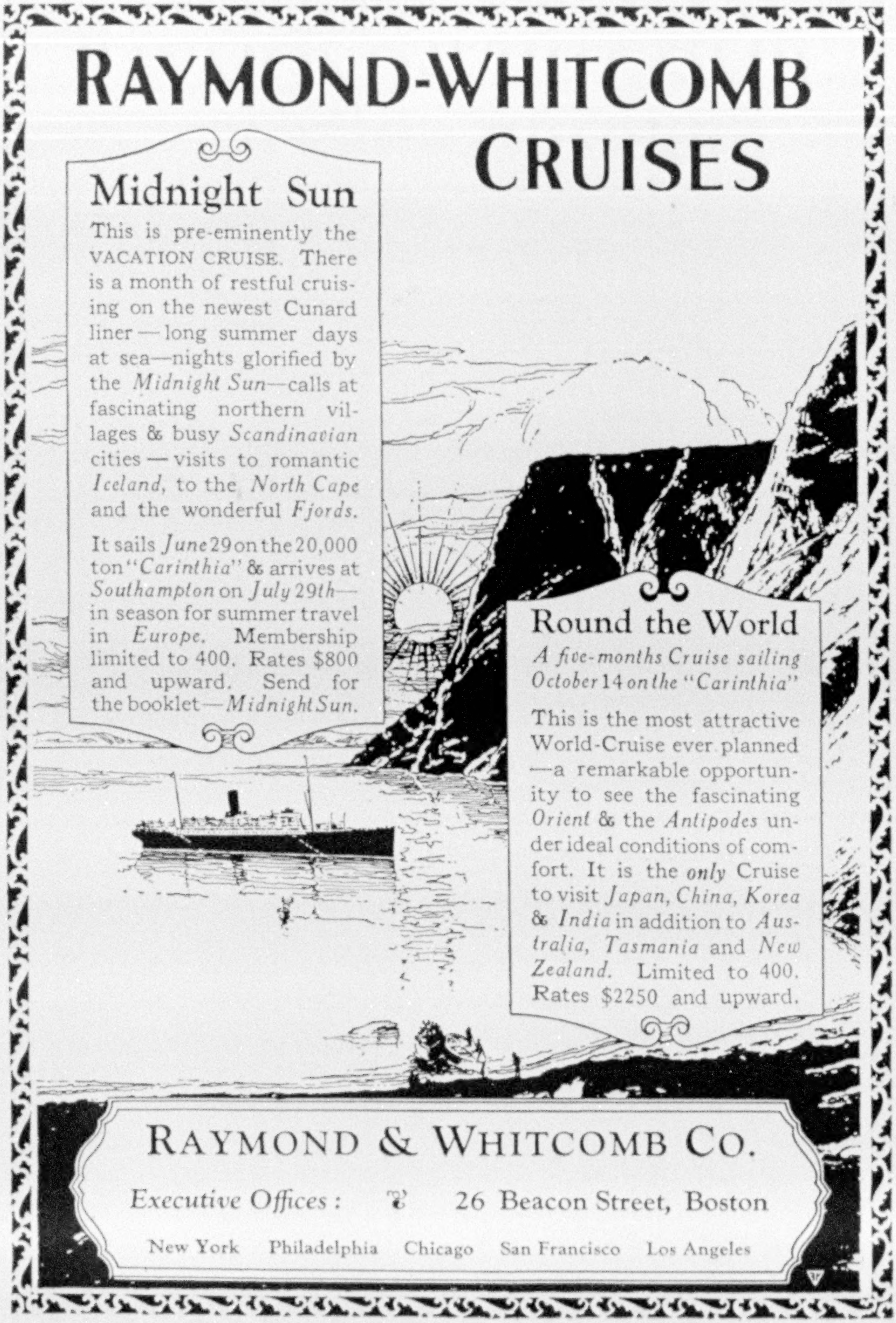
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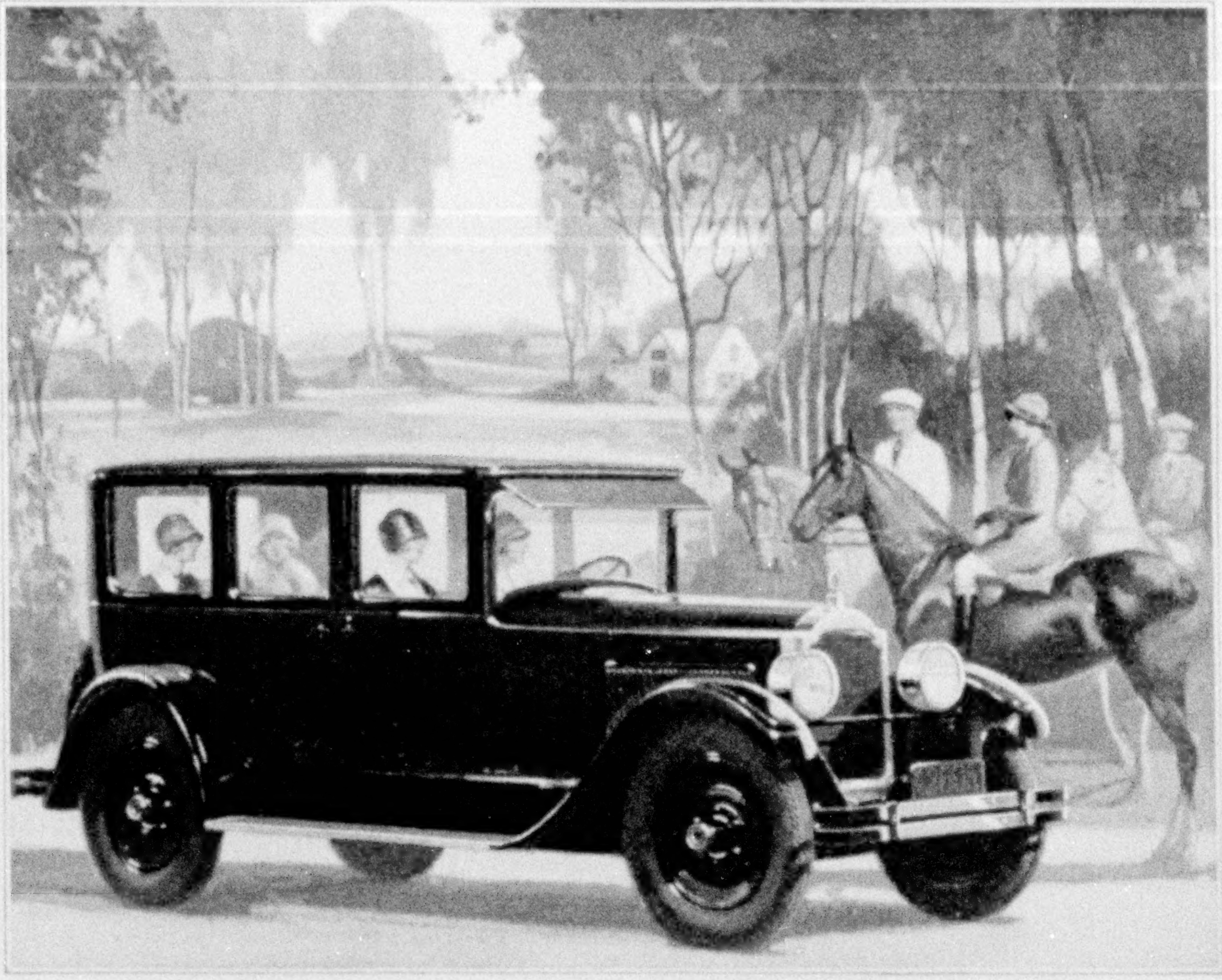

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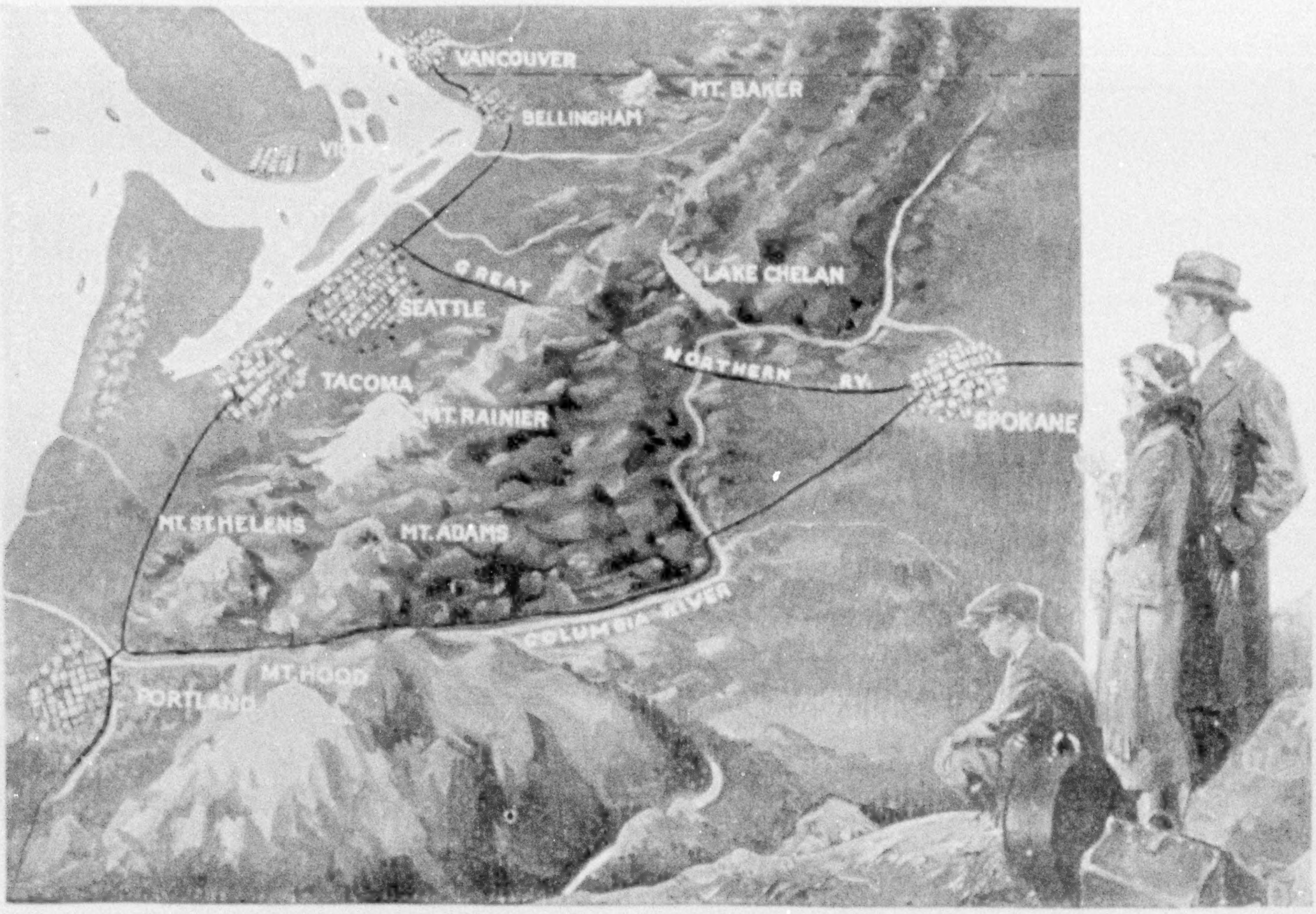

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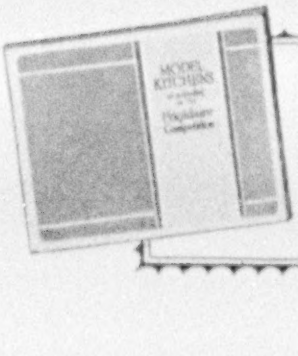

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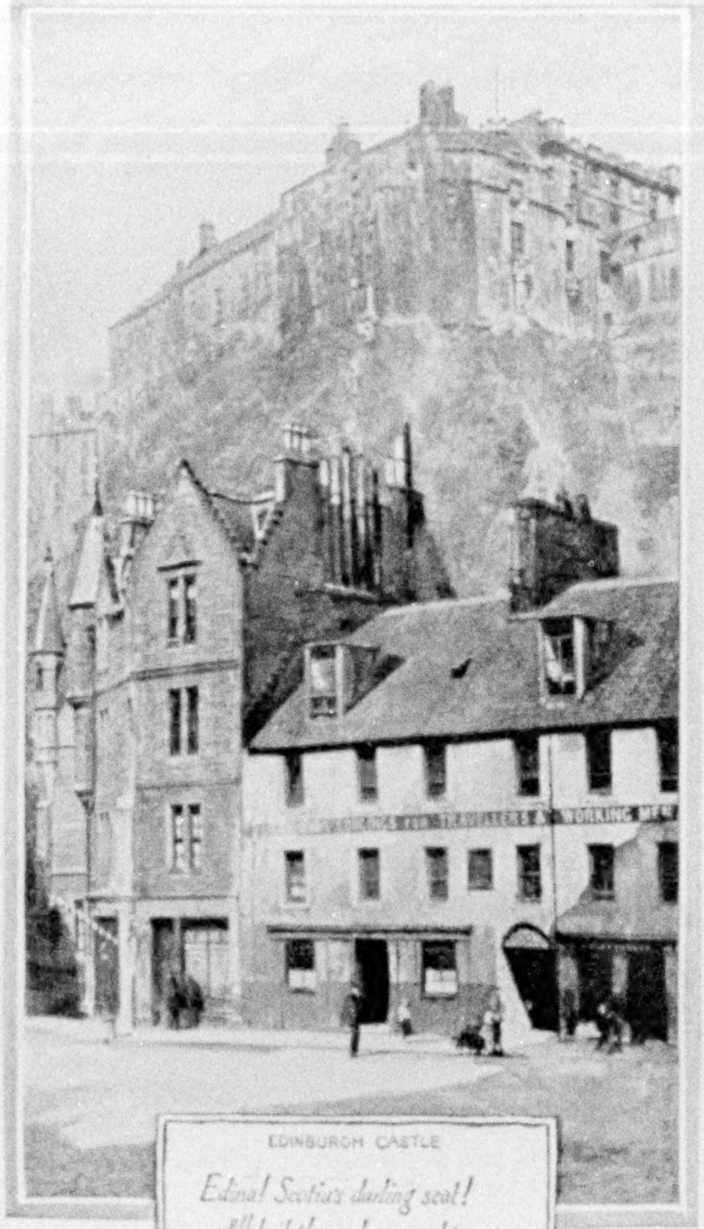

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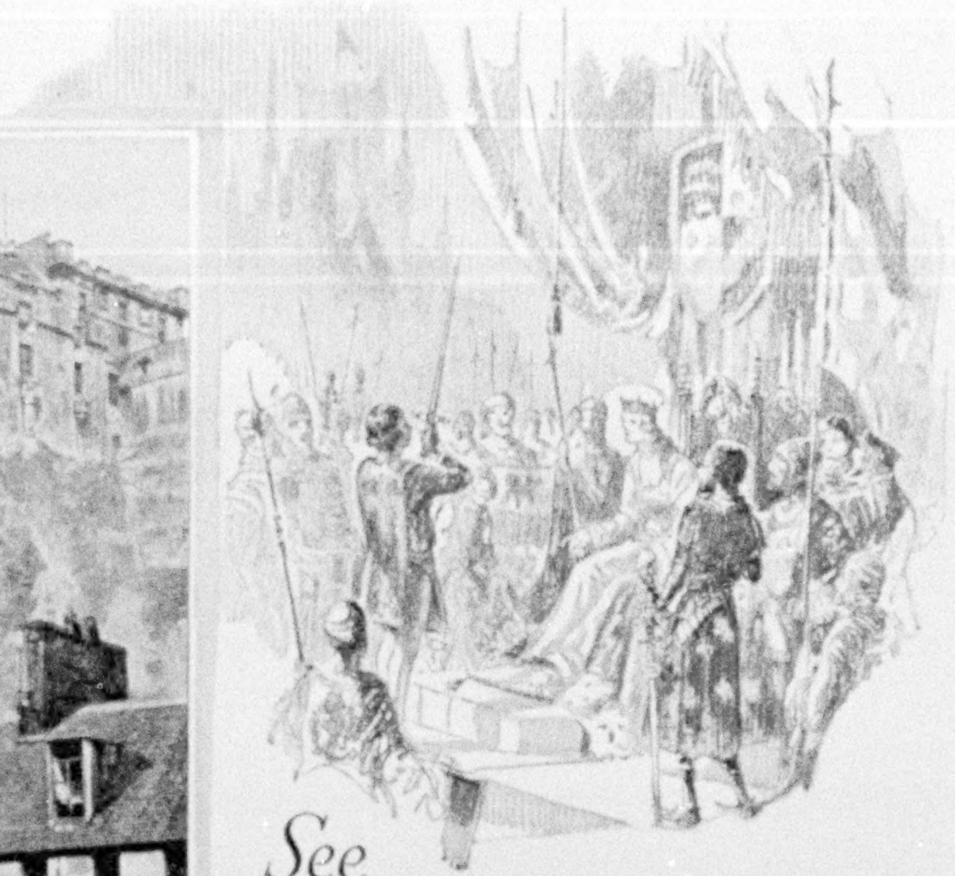

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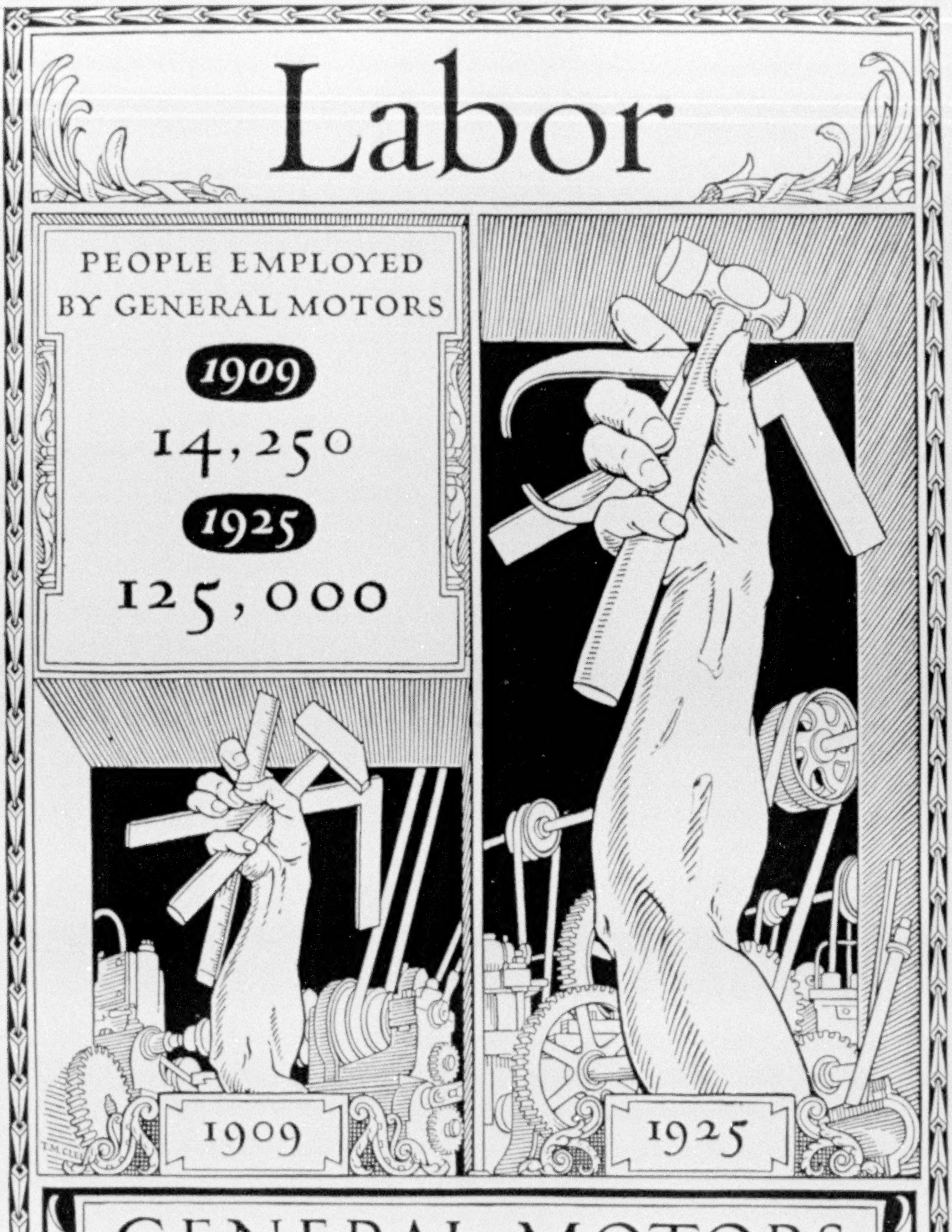

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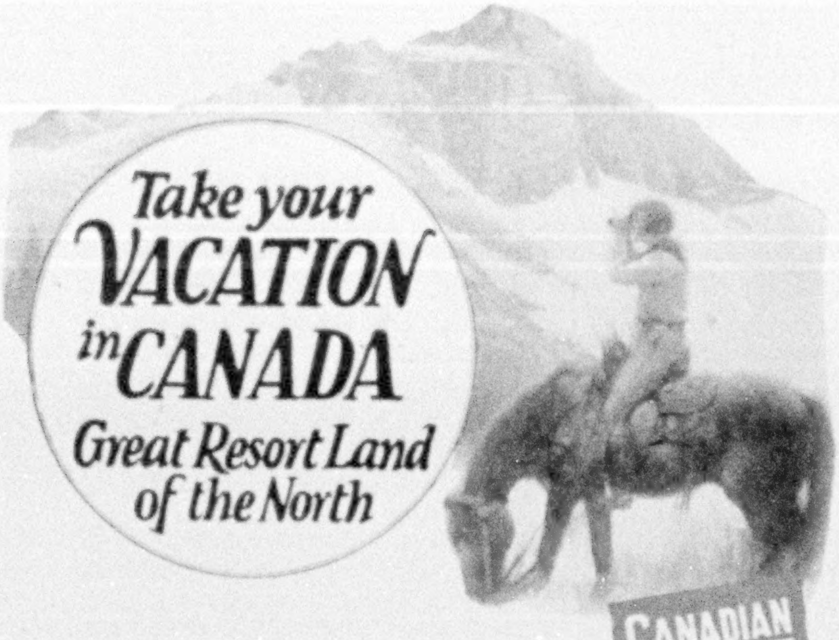

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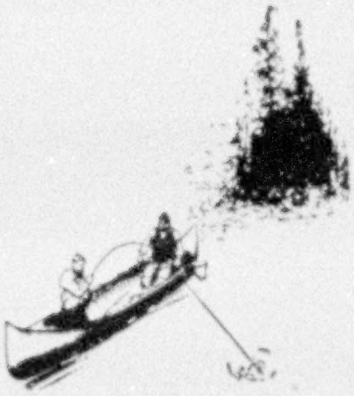

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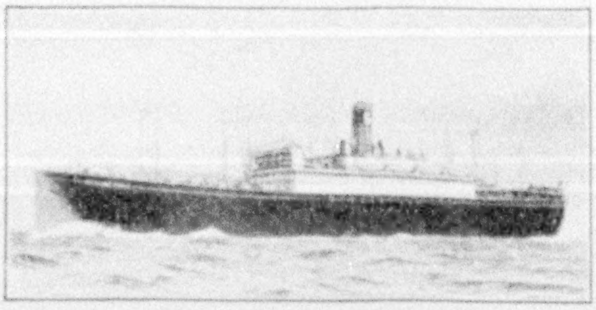

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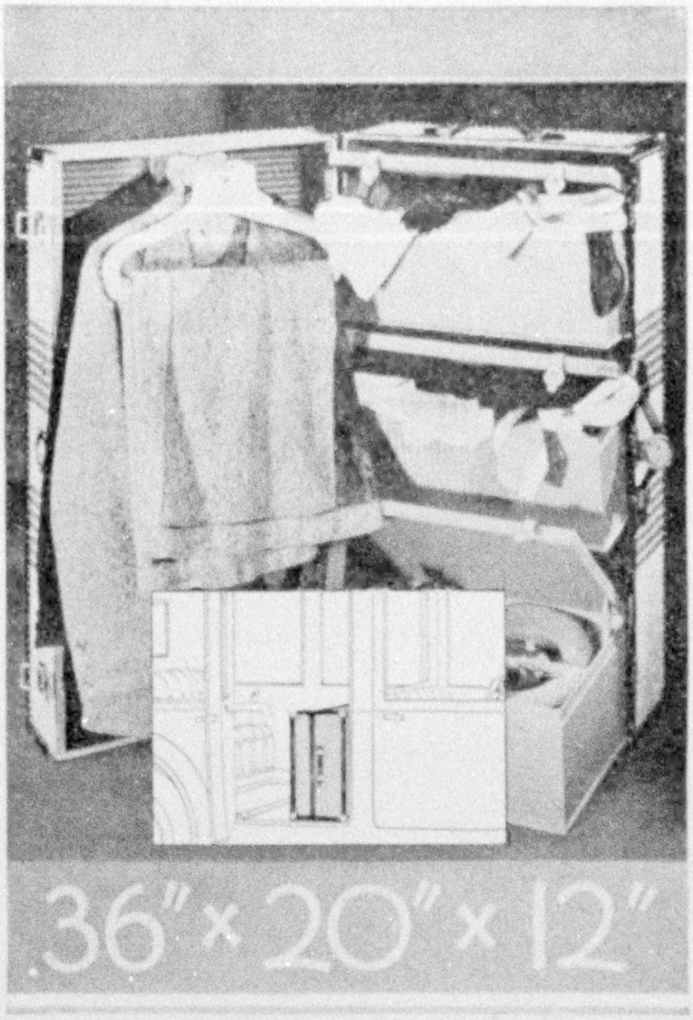

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GREAT
VACATION!

Two memorable weeks at low cost

Consider this Great Vacation—and how easy you can have it this year.

Glacier National Park is a wholly new experience, overwhelming at first. Imagine a new world of surpassing bigness, grandeur and natural beauty. That is Glacier.

Its living glaciers you can climb. On the back of a horse, or from a smooth-gliding launch on an emerald lake you can explore and enjoy these mightiest of the Rockies. You can motor over beautiful mountain highways.

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Plan this great vacation now. For real enjoyment come on the Burlington. Famous Burlington service—you'll delight in every mile of it. You'll understand why the Burlington is the "most popular route to the Rockies." Send the coupon below.

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If you don't wish to plan your own Glacier trip join a Burlington Escorted Tour party. All expenses included in lump sum. Travel expert with each party arranges details, side trips, everything —at no extra cost. Write for Tour Book.

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Send me your free illustrated book about Glacier National Park.

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☐ Mark an "X" here if you wish the book on Burlington Escorted Tours.

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The American traveler is known by the color of his money.

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"See this world before the next"

Canadian Pacific

World's Greatest Travel System

"The Song of the Shirt"

"Work, —work, —work;
In poverty, hunger and dirt
A woman sat in unwomanly rags
Singing the Song of the Shirt."

—*Thomas Hood*

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But a force still greater than laws is at work. Electricity is the great emancipator.

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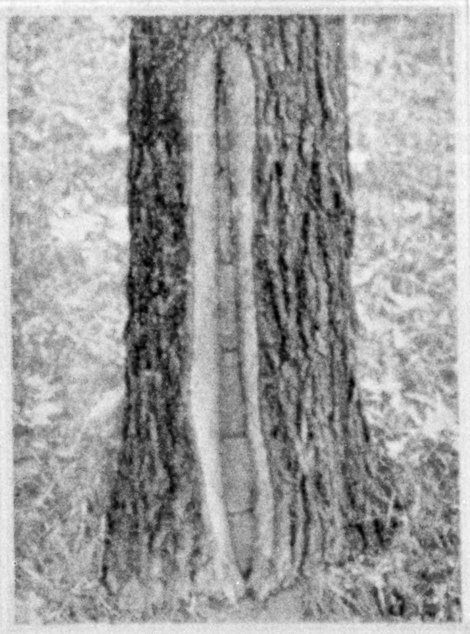

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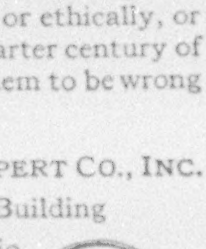

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Reg. U. S. Pat. Off.

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Gentlemen: Without cost or obligation on my part, please have your local representative examine my trees and advise me as to their condition and needs.

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–and Pineapples Juicy-Cool

Nature's summer ambrosia . . salad of the gods! . . a dozen fruits in one, glorifying miles of breezy uplands. Guavas for the picking on highways; breadfruit and mangoes as yard trees; papaias, passion fruit. At breakfast whiff the Kona coffee that grew nearby. Ah! This is June and you're *in Honolulu!*

Great trees flower in fiery red, yellow, pink, arching streets that lead *mauka* (toward the mountain) or *makai* (toward the sea). Rare night-blooming cereus . . cold, white, silver moons . . crisp northeast tradewinds! "Boy, another bed-cover."

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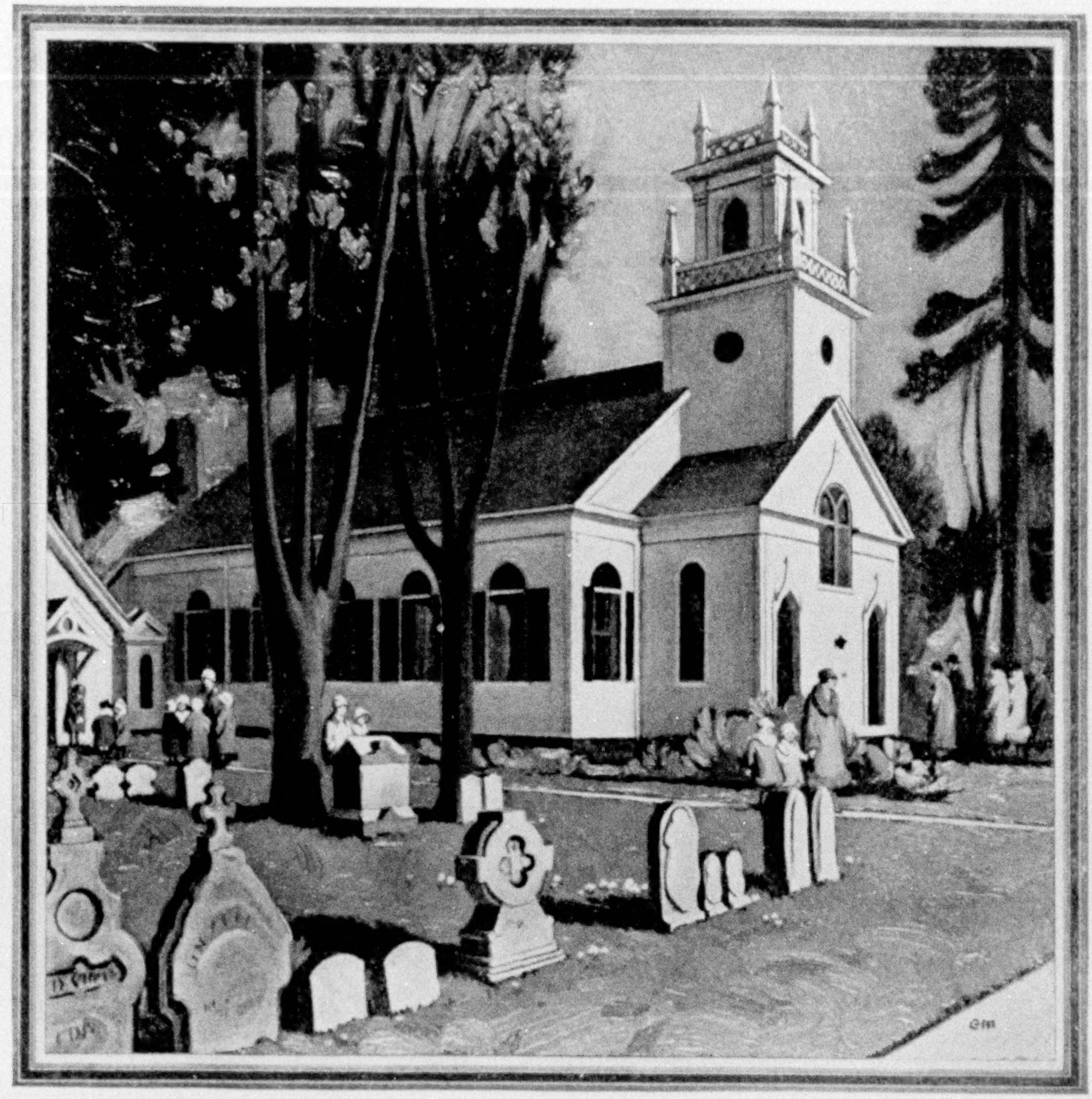

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Completed in 1814.
Zibeon Hooker, drummer boy at Bunker Hill, is buried in the churchyard.

Your love speaks through the beauty of the memorial you erect. Nothing is acceptable, therefore, in material or workmanship unless it be of enduring worth.

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Our Certificate of Perfection, when requested from any memorial dealer, assures you of our personal inspection through the various stages of completion and is your perpetual guarantee against defective workmanship and material.

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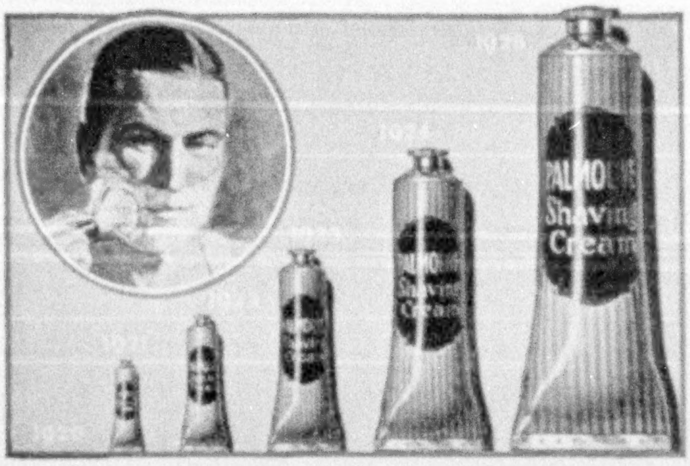

Men are Quitting

—by the millions—old-type shaving preparations for this unique creation.
Accept, please, a 10-day tube to try.

GENTLEMEN: Five years ago Palmolive Shaving Cream was unknown. Today it is leader in its field.

It is a unique creation. It differs immeasurably from any shaving soap you have ever tried. Eighty per cent of its users once were wedded to rival makes of shaving soaps.

It is based on the four requirements 1000 men named as their ideals of a shaving cream, plus a fifth . . . strong bubbles . . . which we ourselves added.

We think you will like it. Sixty years of soap study stand behind it. The same careful study that made Palmolive Soap the leading toilet soap of the world.

May we ask you, then, the courtesy of trying it, both in your interest and in ours?

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1—Multiplies itself in lather 250 times.
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4—Strong bubbles hold the hairs erect for cutting.
5—Fine after-effects due to palm and olive oil content.

We think we have done a great job. You may agree, or you may not. But in fairness to us both please give it a fair trial. Send the coupon. Do this today.

To add the final touch to shaving luxury, we have created Palmolive After Shaving Talc—especially for men. Doesn't show. Leaves the skin smooth and fresh, and gives that well-groomed look. Try the sample we are sending free with the tube of Shaving Cream. There are new delights here for every man who shaves. Please let us prove them to you. Clip coupon now.

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Simply insert your name and address and mail to Dept. B-1169, The Palmolive Company (Del. Corp.), 3702 Iron Street, Chicago, Illinois.

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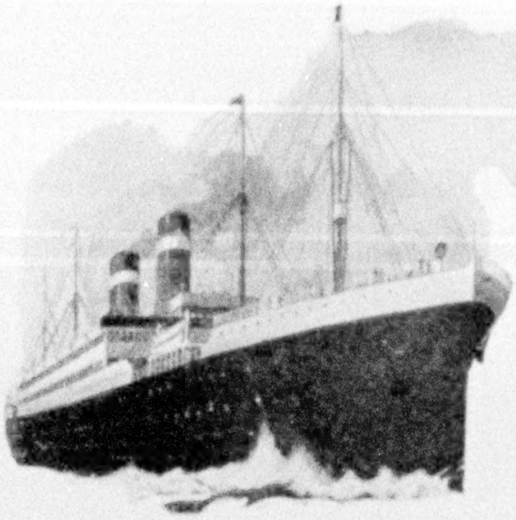

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A CABIN SHIP is without first or second class distinctions. Passengers have the freedom of the entire vessel. As in an American hotel, all guests enjoy the same privileges and the same service.

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"Republic"
"President Harding"
"President Roosevelt"

The President Harding and President Roosevelt are the *fastest* Cabin liners to Europe. The America is the *largest* and the Republic is one of the most popular.

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Regular sailings from New York to Cobh (Queenstown), Plymouth, Southampton, Cherbourg, Bremen.

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Get complete information from your local steamship agent, or write to the address below.

United States Lines

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45 Broadway
New York City

"But what *can* I do?"

she asked

WHEN she spoke or smiled, two even rows of strong, white teeth flashed and sparkled, made her fascinating beyond words.

"When I was your age, my teeth were just like yours," said her mother one day, "But they didn't last, though I did everything to save them. Cleaned them scrupulously; used the best of dentifrices."

Marion fell silent. She, too, brushed her teeth regularly, yet had not altogether escaped trouble. But what of the future? she thought. Her mother's words alarmed her. She now recalled what her dentist had recently said.

"Put this little mirror in your mouth," were his words, "and look behind your teeth, in the crevices and hidden spaces. That's where I look for trouble. Your brush doesn't get in there. Food collects and ferments. Decay, tartar, pyorrhea, follow."

"But what *can* I do?" she asked.

"Get a liquid cleanser," he said. "Not a mere antiseptic wash. It will help you clean not only the visible surfaces, *but the hiding places of decay and tartar.* Fortunately such a preparation has lately been perfected at one of our leading univerities—a gentle efficient solvent for mucin film, sought by experts for 30 years. He mentioned the name, but she had forgotten. She would ask him again.

That is how she came to use Mu-Sol-Dent. Now her mother is using it, too. Her gums had been sore from wearing a plate, but they feel very comfortable now. Mother and daughter have discontinued using tooth paste or mouthwashes. Mu-Sol-Dent takes the place of both. Their dentist is pleased.

"No new cavities, and very little tartar," he said on her last visit. "And your teeth look more beautiful than ever."

"Mu-Sol-Dent is wonderful," she says. "So pleasant to use; makes my mouth feel so sweet and clean; and my throat, too. It costs a little more, but is really an economy, considering all it does for me."

Mu-Sol-Dent

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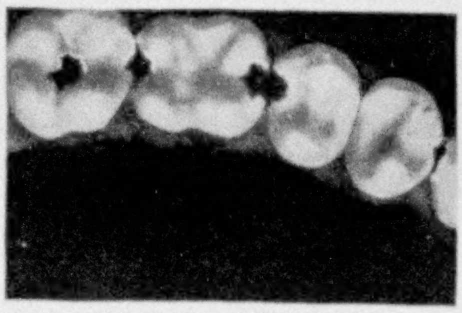
Certifies that C. C. VOGT, A.M., Ph.D., an Industrial Fellow at the Institute, discovered and perfected the formula of "MU-SOL-DENT" which is chemically an efficient solvent of mucin plaques.

The scientific answer to the problem of cleaning teeth. A gentle effective solvent of mucin film. Sought by experts for 30 years. Discovered at the Mellon Institute, University of Pittsburgh.

Look behind and between your teeth! Be they ever so clean in front, in the hidden crevices, decay and danger lurks.



Ordinary methods of cleaning won't do—brush and paste don't get in there to clean—your past experience proves it.

At all leading Drug Stores. Get a bottle today, or send 10c for sample bottle.

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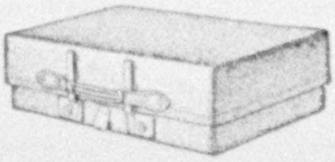
A handsome suitcase which, by the application of a simple mechanical principle, serves any occasion—the short visit or the long journey.

Fits its contents—great or small—with the exact degree of snugness necessary to protect them from crushing or tumbling about.

No need to force it to close—the locks extend—the hinges extend. Simply pack the case, put in everything, close the lid, press it down—click, click, click—all firm and snug. Yet there's still plenty of room for that last-moment "more".



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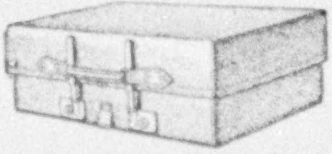

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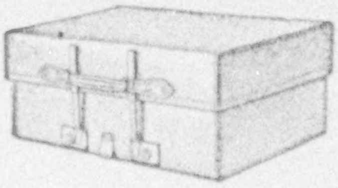

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TO make your Pacific Coast trip memorable plan for ample time at Seattle. Ten days is the minimum in which you can do justice to this interesting, growing Pacific Northwest Metropolis and gateway to the Orient and Alaska.

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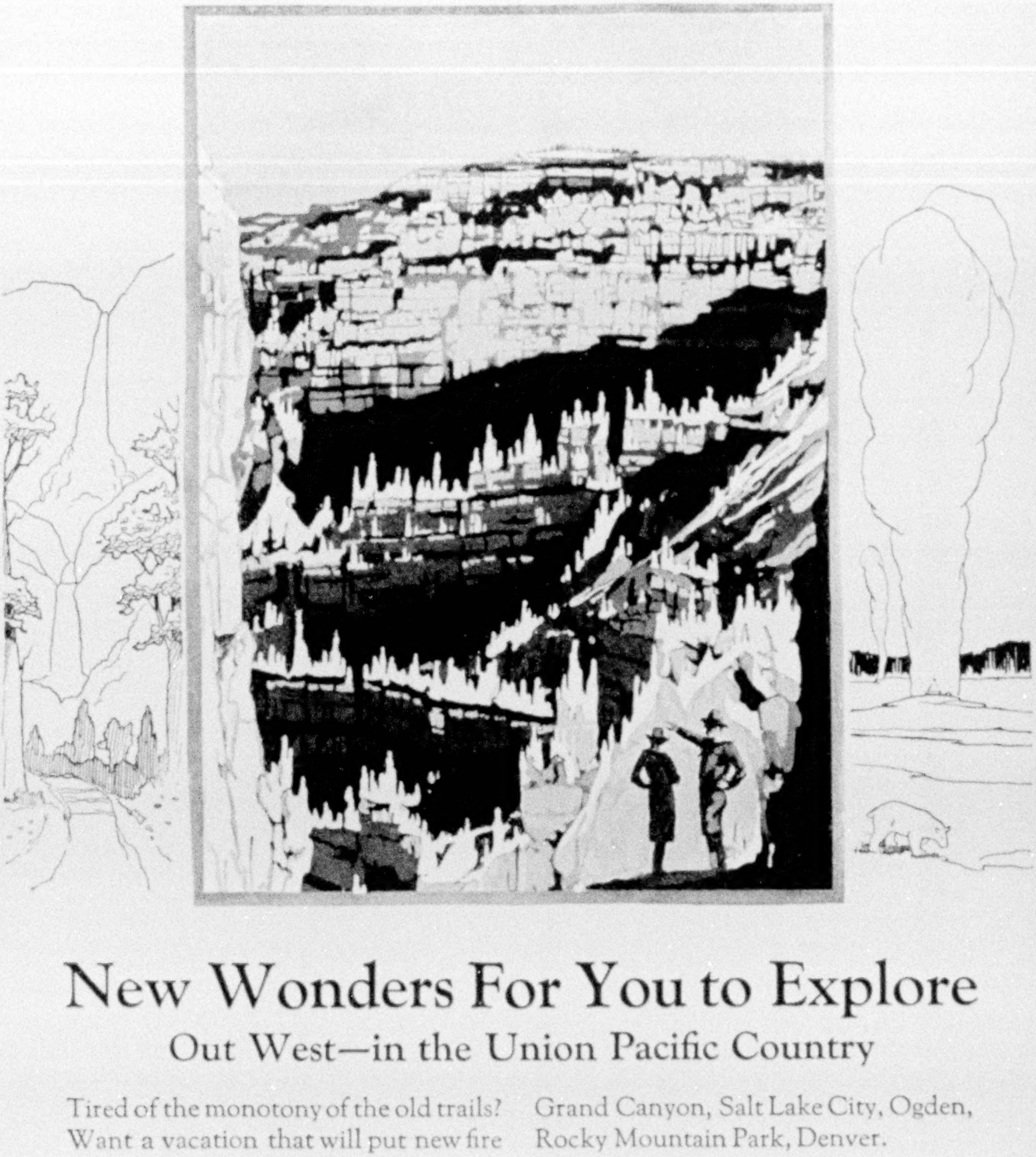
Seattle

Metropolis of the Pacific Northwest



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Out West—in the Union Pacific Country

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THE LAND OF TEN THOUSAND LAKES

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Come to Minnesota. Here you may live the carefree life in the open or dwell in one of the many modern hotels that nestle close to the shores of her beautiful lakes.

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Gentlemen:- Please send me booklet and information on vacations in Minnesota.

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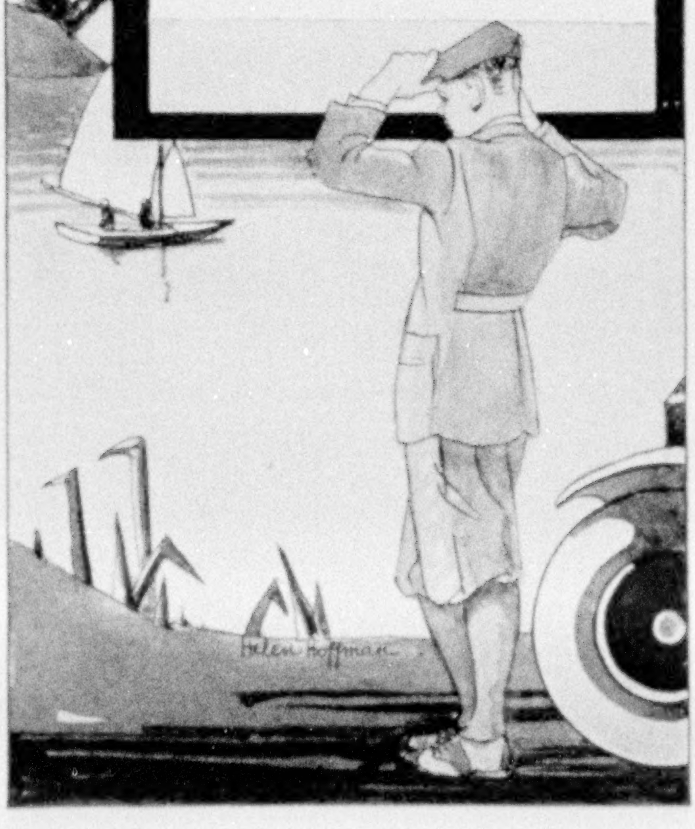

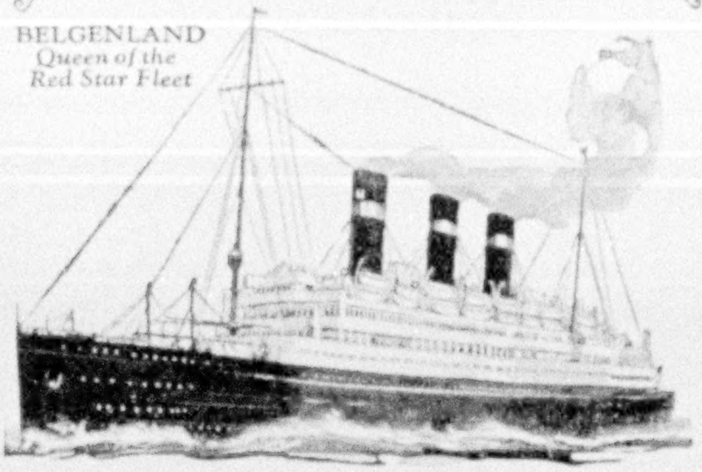

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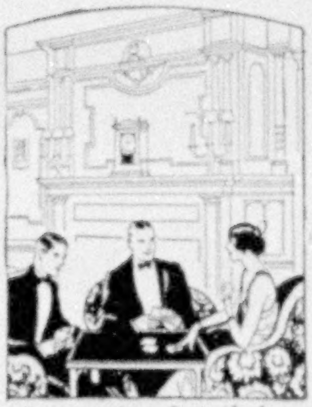

A game of cards in the luxurious lounge of the Belgenland where the indoor life of the voyage centers.

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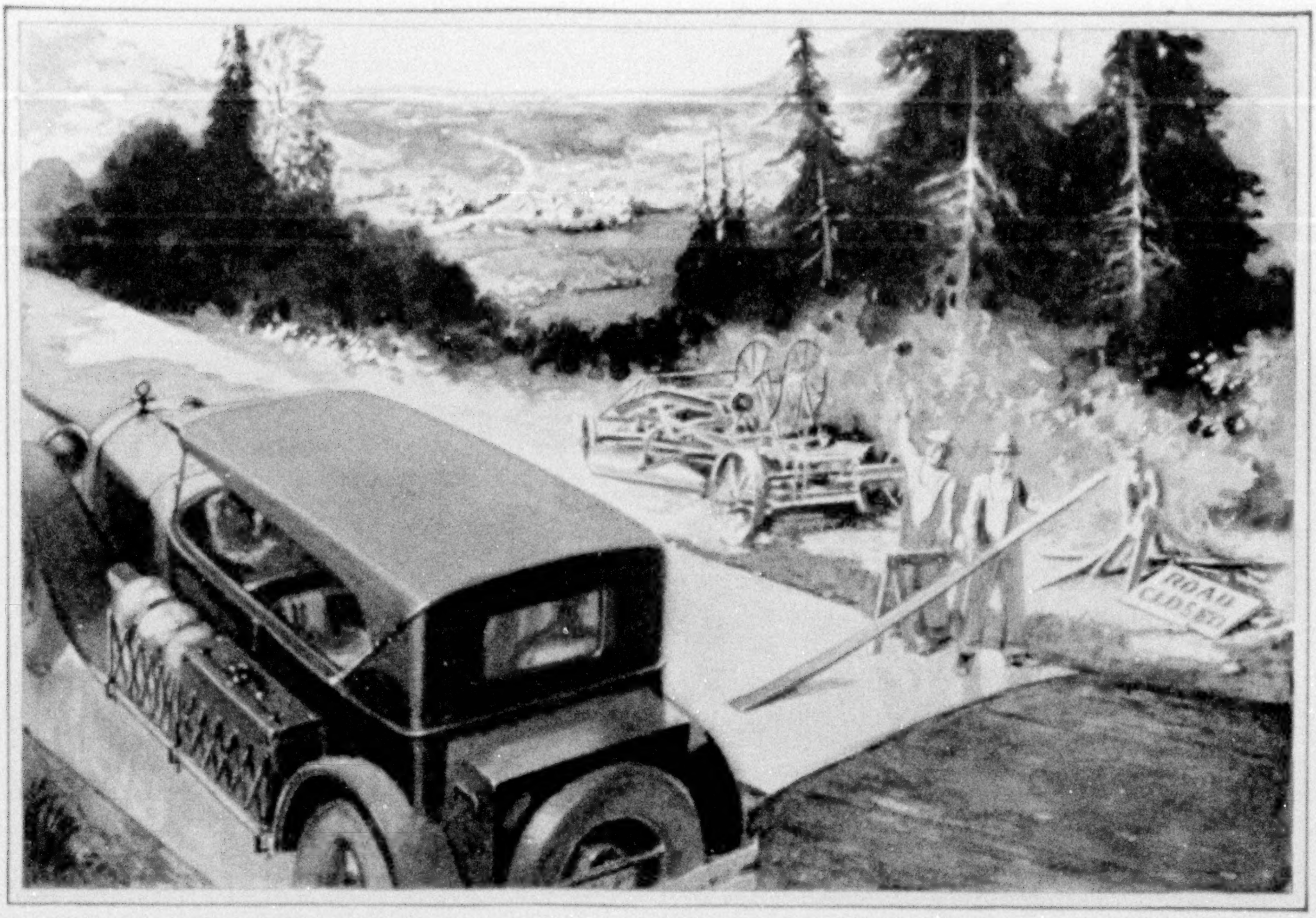

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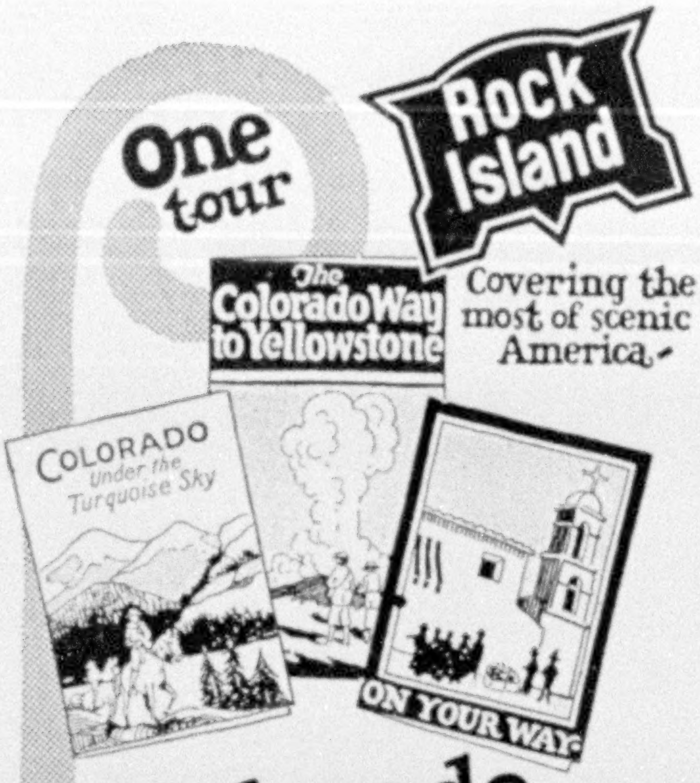

Colorado Yellowstone California

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Rock Island Lines so reach across our Western Vacation Region that an almost unlimited number of tours, affording the widest possible range, are available at a remarkable saving of time and funds.

Step on the luxurious Rocky Mountain Limited at Chicago today; step off in the Rocky Mountains unlimited tomorrow, the first step on your Colorado way to Yellowstone. Rock Island is also the route of the all-Pullman Golden State Limited and Memphis-Californian to and from California. See Old Mexico on your way. Other fast through trains on convenient schedules.

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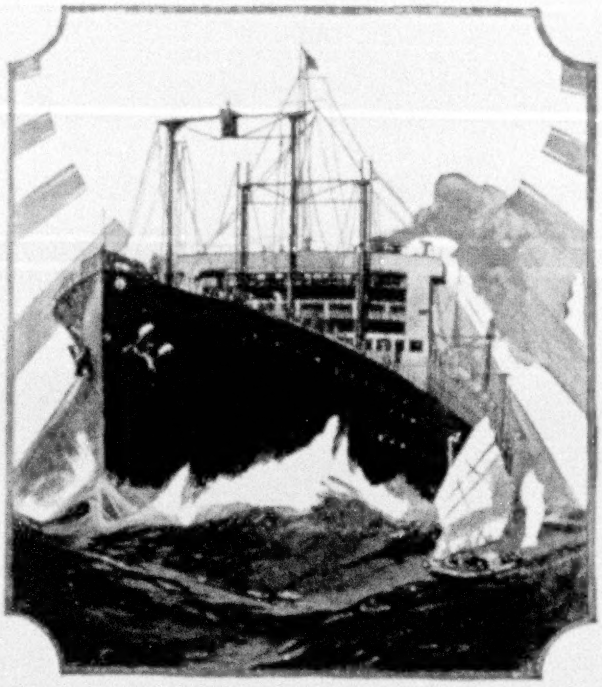

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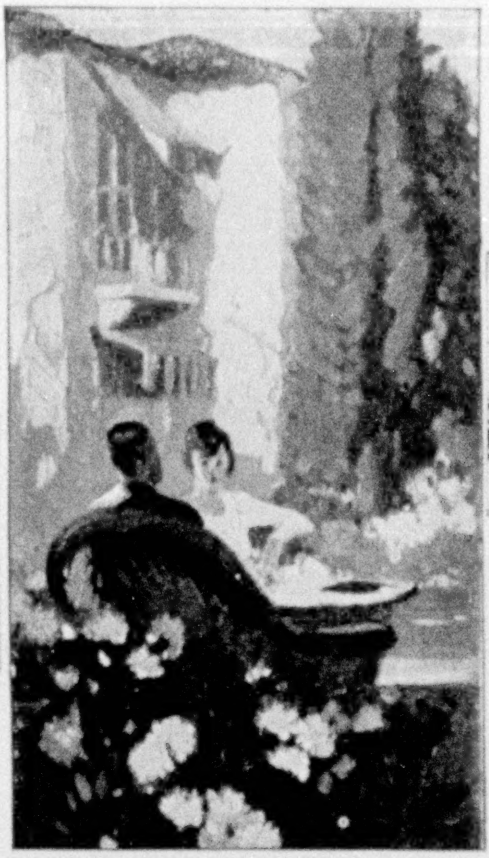

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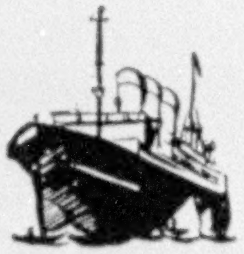

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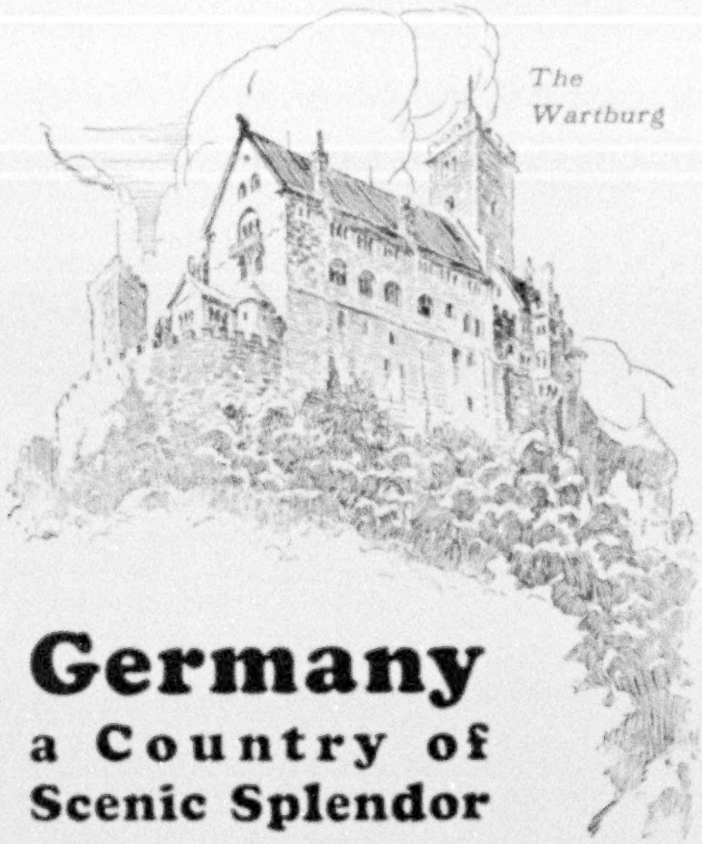

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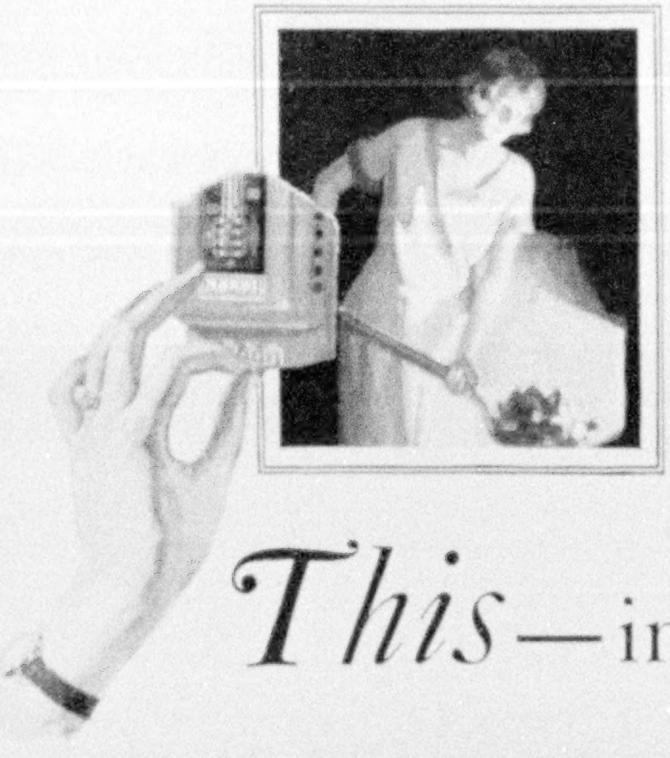

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FOR WIVES *whose husbands think*

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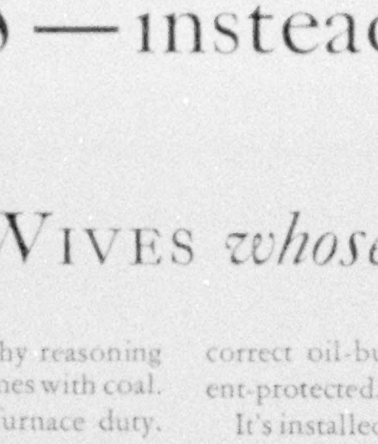

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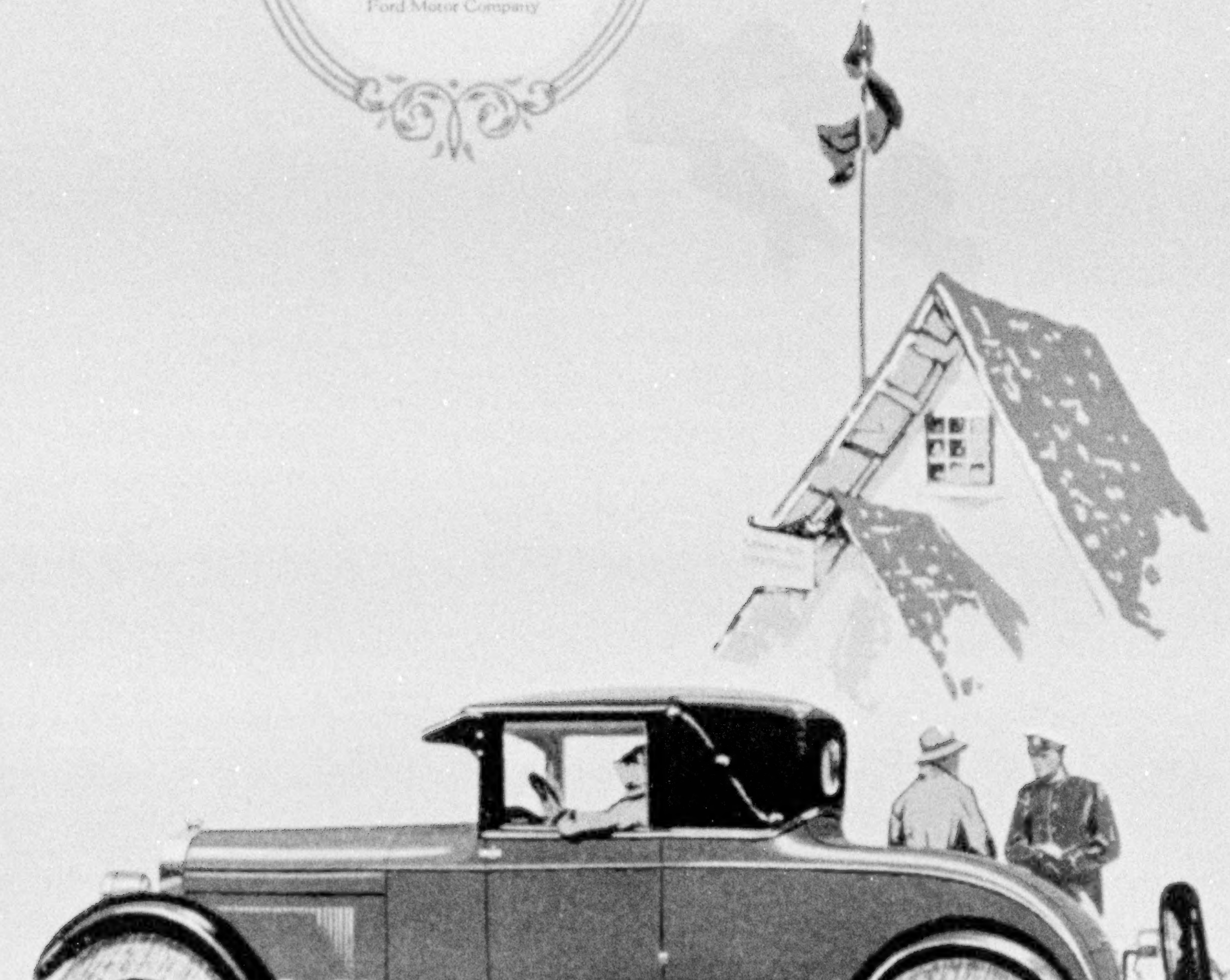

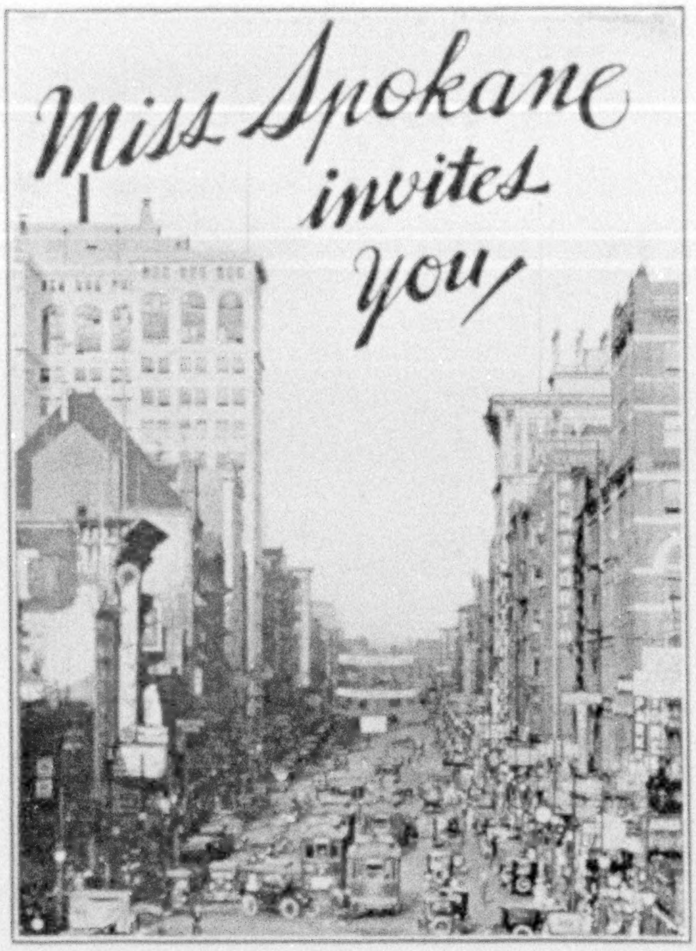

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Protect the Blossoms

THE business of being a parent is difficult at best. There are days when the children are so exasperating that you forget what they really mean to you.

But at night, when you steal quietly in for a last good-night look, how like blossoms they seem—exquisite promises of the future. You dream of the things you hope to do for them—of the advantages you wish to give them—of the gifts you would like to lavish upon them. But has it occurred to you that there is something else that perhaps you should be doing for them right now?

Today—before it is too late—use the great gifts of modern medical science to protect your children from disease and to help them become strong and healthy men and women—physically, mentally and morally.

Three Important Things to Do

These are things which, if not already done, you should do at once:

First. See that your children are vaccinated against smallpox.

Second. Make sure that they have toxin-antitoxin treatments to prevent diphtheria.

Third. Have them examined at least once a year to correct physical defects. Especially, teeth, eyes, ears and tonsils should be thoroughly inspected; adenoids, when present, should be removed.

With positive protection offered against two of the most dreaded diseases, smallpox and diphtheria, it is little short of criminal negligence to overlook these simple precautions.

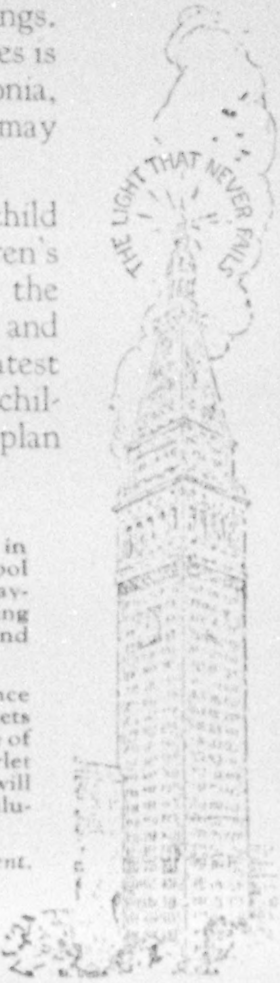
Can you call yourself a good parent unless you are able to say, "My children have the best protection I can give them!"

Even Minor Ailments are Dangerous

More children die from measles and whooping cough than from dreaded scarlet fever. Chicken-pox and mumps may be indirect causes of death. Some of the most contagious diseases, such as measles and whooping cough, for the first two or three days appear to be nothing but "colds". Even at this stage, before the real sickness is recognized, infection of others may occur.

Frequently whooping cough leads to pneumonia or permanently injured lungs. Unless a child who has measles is carefully nursed,—pneumonia, mastoiditis or kidney trouble may result.

Do not think that your child must have all the children's diseases and "the sooner the better." Protect your boys and girls. Health is the greatest blessing you can give your children. Now is the time to plan for it—in blossom time.



For the past three years May Day has had a new meaning. It has become National Child Health Day—the day on which every state in our country takes stock of the health and welfare of its children.

While there have been great gains in protecting the lives of children, these gains have been accomplished by the extraordinarily good work done in some parts of the country. Tremendous betterment will result when the same good work is carried on everywhere.

The New May Day unites us in planning for more sanitary school buildings, for more and better playground facilities and for unremitting supervision of the water, milk and food supplies of a community.

The Metropolitan Life Insurance Company has prepared pamphlets on the cause, prevention and care of Measles, Whooping Cough, Scarlet Fever and Diphtheria. They will be mailed free and may be invaluable to you.

HALEY FISKE, *President.*

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PINK OF PERFECTION CHOCOLATES

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VOL. XLIX, NO. 5 WASHINGTON MAY, 1926

THE NATIONAL GEOGRAPHIC MAGAZINE

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MOTOR-COACHING THROUGH NORTH CAROLINA

By Melville Chater

Author of "History's Greatest Trek," "Rediscovering the Rhine," "Through the Back Doors of France," etc., in the National Geographic Magazine

"MADE to order," in its most complimentary sense, describes Raleigh, capital of North Carolina. The capital's location was chosen by the General Assembly in 1788, and, the National Capital excepted, it is unique in being thus planned and built. A charmingly harmonious result is seen in the wide, oak-shaded streets converging at the statehouse, which rises in sheltering dignity above these namesakes of North Carolina cities (see illustration, page 476).

Of North Carolina's presidential trio—Johnson, Polk, and Jackson—the first-named was born at Raleigh and there served as a tailor's apprentice.

But a visit to North Carolina should not begin in any such relatively modern environs as century-and-a-quarter-old Raleigh.

DISCOVERING WILD HORSES AND TAME TERRAPIN

Three months was far too short a time to renew the memories of boyhood while marveling at the changes which have come with the development of hydroelectric power, the extension of the public school system and the diversification of agriculture. The privilege of seeing every corner of North Carolina in that brief period would have been impossible except through the medium of the motor coach, by which the writer traveled for more than 2,000 miles in the State.

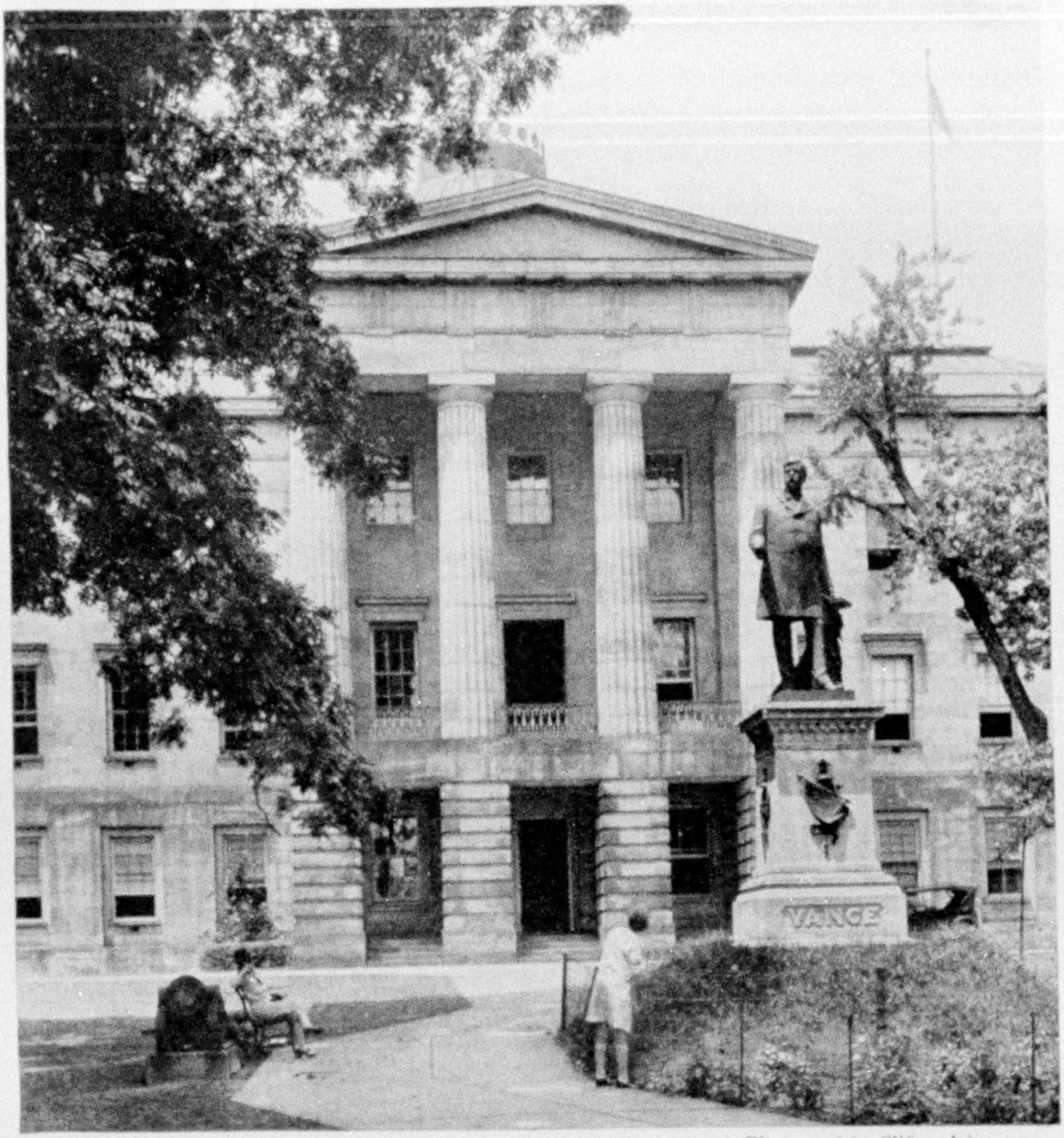
A thirty-passenger coach sped us over 157 miles of asphalt road to Morehead City, where a motor boat took us across Bogue Sound to Beaufort. In this quaint port, with its gigantic oaks, prim flower plots, and vistas of rigging, there breathes that ghostly old-wordliness of certain New England fishing villages. And the broad speech, flavored with by-gone idioms, carries one still further back, even to Devon; for Beaufort is the gateway to Hatteras Banks and the 16th-century sea trail of Raleigh's mariners (see map, page 512).

Our discoveries began with wild horses and tame terrapin. We found the former on the near-by Banks, the latter at the U. S. Biological Station at Beaufort.

In addition to marking and releasing terrapin to restock local waters, this station has demonstrated that winter feeding, in contradistinction to hibernation, accelerates by a year the creature's growth to a commercially profitable size. "Br'er Tarrapin" may live to the respectable age of 25 years unless he comes to an untimely though gastronomically glorious end, with a hotel menu as his epitaph.

TRADITION SAYS WILD HORSES ARE DESCENDED FROM RALEIGH'S PONIES

North Carolina's shellfish beds, dotting 1,500 miles of ocean and sound shores, have at times been seriously depleted for lack of uniform laws and systematic enforcement. The near-extinction of the terrapin should point its lesson.



Photograph by Clifton Adams

EAST FRONT OF THE STATEHOUSE, RALEIGH, NORTH CAROLINA

From the made-to-order capital of the Tarheel State the author began his motor-coaching tour (see text, page 475).

No biological station has been needed to conserve the wild horses. For centuries they have been roaming on the Banks, and current tradition has it that they are descended from Barbary ponies which were brought over by Sir Walter Raleigh's colonists.*

Our quest landed us on a naked, sun-baked spit where men were driving the so-called "banker ponies" along the beach and into a corral made of timbers from old wrecks. Perched on the pen's top rail, with the beach-pounding surf along one edge of the narrow spit and the sound, with its rough sailboats, on the other, we took lens shots at the inclosed jam of 200 horses, as they reared and kicked each other into a state of bloodied noses and wildly rolling eyes (see page 499).

Some of the herders lassoed and cut out

* Additional copies of the supplement, "Boyhood of Sir Walter Raleigh," by Sir John Millais, issued with this number of the NATIONAL GEOGRAPHIC MAGAZINE, may be obtained, unfolded and printed on special art paper, at 50 cents each.

Photograph by Clifton Adams

WHERE ENGLISH SETTLEMENT OF AMERICA WAS FIRST ATTEMPTED

The monument reads: "On this site, in July, August, 1585, O. S., colonists sent out from England by Sir Walter Raleigh built a fort called by them 'The New Fort in Virginia.'" Near this place was born, on August 18, 1587, Virginia Dare, the first child of English parents born in America (see text, page 484).

Photograph by Clifton Adams

"MOTOR-COACHING THROUGH NORTH CAROLINA"

Luggage is stowed in a compartment at the back. The coaches all bear names, usually of cities, as Miss Asheville, Miss Wilmington, Miss Raleigh, and so forth. Business men commonly make their trips by bus, as there are regular connections between one line and another, and the traveler can cross the State comfortably, a distance of 500 miles, at a rate which is supposed to be 30 miles an hour, but is more usually 59. Sleepers are planned for the immediate future.

colts for branding or sale. Others yelled out their branding marks, recognized on mares, and claimed the accompanying foals (see pages 481 and 482).

The sun blazed, the sand blazed. Lookout Light's heat-shimmering shaft, flat as a white paint stripe against the sky's burning blue, constituted that wild spit's only sign of civilization. The men were shouting in their broad dialect, so like that of the rural England of their ancestors. The United States seemed worlds away.

The heat drove some of them to a waterhole on the beach, where they lay prone and drank the brackish fluid. It was a wild animals' drinking place, for the banker ponies slake their thirst by scooping holes in the sand with their forefeet.

Due to a tick epidemic, the ponies were driven into a dipping sluice, where they swam through a bath of arsenic and caustic soda. A green paint stripe, slashed across each emerging beast's flank, marked him as disinfected (see page 480).

The gates were then flung wide and the herd trotted forth to liberty, snorting disapproval of man and his strange ways; then a chosen dozen were auctioned off at about $6 a head. A few years ago these putative descendants of Raleigh's "little Barbary ponies" were bringing from $50 to $125 apiece. The auctioneer, in explanation, complained, "Tew much gasoline abaout naowadays!"

AT THE SCENE OF RALEIGH'S FIRST COLONIZING VENTURE

Next morning we left Beaufort on a mail-launch, which for eight hours puttered lazily across the wide waters of Pamlico Sound. Small wonder that the first English explorers mistook for an inland sea this 75-mile stretch of water! Often its broad expanse left us no sight of land save some occasional island where past Presidents have shot in duck season.

A long, low land strip, dotted with tiny dwellings and sentineled by a lighthouse, upstanding like a chalk crayon against the blueness of sea and sky—such is the approach to what 16th-century maps call Wokokon and the 20th-century knows as Ocracoke. Town, village, port—none of these appellations fits its sea-flavored individuality half so well as the natives' phrase, "the neighborhood."

Unforgettable is this quaint, hodgepodge layout of little low houses, embowered under spreading live oaks and gaudy crape myrtle, the garden plots running at all possible angles to each other and often containing family graves, across which the winds blow forever, with the rippling of the sound or the booming of the sea (see map, page 512).

There are no streets, no roads; there is only "the way," lying along some myrtle-smothered sand trail. It seems almost a matter of politeness on the part of ocean and sound that they don't clash together upon this mere sandspit. Indeed, 20 years ago a great wave "creamed ashore," as the natives say, and drowned Ocracoke, leaving behind the strange spectacle of a goat and a porpoise wedged in the fork of the same tree!

RALEIGH'S FIRST EXPEDITION

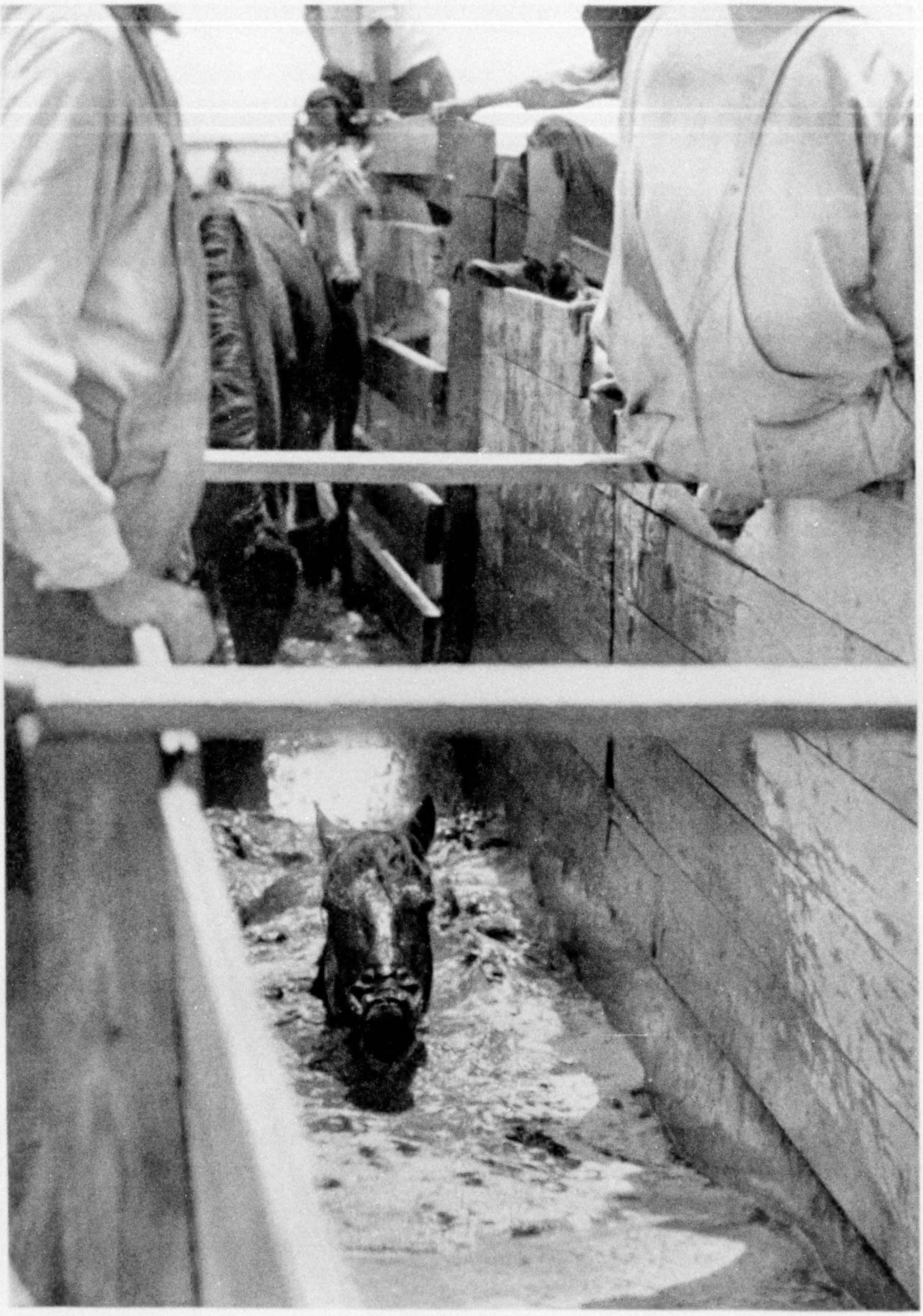
As to Ocracoke Inlet being the scene of the arrival of Raleigh's first expedition, North Carolina historians are, at any rate, more nearly agreed than were Sir Walter's contemporaries as to the spelling of his name. Of the latter there are 74 recorded variations, while he himself used six, ours being one he never employed.

To Raleigh's half-brother and co-adventurer, Humphrey Gilbert, is attributed a certain "Discourse," addressed to Queen Elizabeth a few years before the expedition, outlining "How Her Majesty may annoy the Kinge of Spaine by fitting out a fleet . . . to discover and inhabit strange places."

On May 27, 1584, upon letters patent issued in Raleigh's name, Philip Amadas and Arthur Barlowe sailed Westward Ho! in "two barkes well furnished with men and victuals." Sixty-seven days later they entered an inlet which pierced what they first mistook as mainland; then "cast anker about three harquebuz-shot within the harbor's mouth," and, landing, took possession in the queen's name.

With the planting of cross and flag, these simple sailors achieved one of history's commanding moments in this preface to the colonizing of a vast continent with English-speaking people.

After exploring the inland waters as far as "Raonoak" (*i. e.*, Roanoke Island), they returned to England and announced



Photograph by Clifton Adams

DIPPING WILD PONIES IN A MIXTURE OF ARSENIC AND CAUSTIC SODA

On the Banks fortnightly dippings are held during seasons when there is a tick epidemic (see text, page 479).

Photograph by Clifton Adams

LASSOING AND CUTTING OUT COLTS: BEAUFORT BANKS (SEE, ALSO, PAGES 482 AND 499)

their discovery under the oddest name that the future United States was ever to enjoy—Win-gan-da-coa! (the Land of What-pretty-clothes-you-wear), the amusing misapplication of the ejaculation with which the Hatteras Indians had greeted them.

Seven months later Raleigh's second and enlarged expedition embarked for the land now rechristened Virginia, after the Virgin Queen. There resulted the coastal exploration of what is now North Carolina and of the "Chesapeans'" country; then the gold-and-pearl seekers, who had been subsisting on sassafras roots and dog stew, returned to Roanoke and thence sailed homeward, bearing to Elizabeth a strange vegetable trio — tobacco, maize, and sweet potatoes—which must have appeared as novel to her as their Indian names—*uppowoc*, *pagatour*, and *openauk* —seem to us to-day.

We planned to cross the various inlets with the coast guards' assistance, and to traverse the successive sandspits by Hatteras' very recently adopted automotive power. In fact, the thirteenth car had just been acquired, and with it the first accident—due, said the owner, "to the craft not answering the helm."

THE GREATEST WRECK AREA OF THE ATLANTIC COAST

In motoring across the Hatteras Banks from the sound to the ocean front, we had entered the greatest wreck area on the Atlantic coast. For 12 hours we passed the skeletons of what had once been ships, now blanched victims of the sea and sand, their upstanding ribs resembling files of gravestones, their forests of protruding spikes being the grisly grass of the desert-like expanse. At one point we counted 14 wrecks within 100 yards.

Offshore lay here a careened schooner, there a crazily tilted steam freighter, the waves' white teeth gnawing at their sides in advance of the northeaster which would

Photograph by Clifton Adams

SUPPOSED DESCENDANTS OF THE BARBARY PONIES BROUGHT TO AMERICA BY SIR WALTER RALEIGH'S COLONISTS

Between 5,000 and 6,000 of these wild horses roam the sand banks of the North Carolina coast in what may be called communally owned herds, but each man knows his own horses and claims them at the round-up (see, also, illustrations, pages 481 and 499, and text, pages 476 and 479).

fling these great hulks into their last resting place among the sand dunes (see illustration, page 490).

The grim joke which says that Hatteras' chief import is wrecks haunted us throughout this 100-mile graveyard of the Atlantic.

And now our seaward-curving beach route revealed the great apex of the Banks, off which are those dreaded quicksands, the Diamond Shoal. They are the more to be dreaded because off Hatteras, due to the enormous tonnage of steel hulls imbedded in the Diamond, there is a magnetic deviation sometimes amounting to 8 degrees.

Compass correction by swinging ship—that is, laying her in different directions toward known points—was the skipper's main resource until the development of the radio and its coastal application by the U. S. Naval Communication Service (see page 503).

Man's allies in this warfare against shoals and shrieking gales are Hatteras Light, the Diamond Shoal lightship, and the radio compass. Since 1876 the enemy seas have eaten inland almost two miles toward the 56-year-old lighthouse, whose 80,000 candle-power flare is known to passing vessels by its 48 consecutive flashes, followed by a 7-minute glow.

The lightship, moored by chains capable of withstanding a 40-ton drag, serves passing vessels with her warning beacon and radio signals for a one-year maximum of lonely vigilance, then she and her crew of 16 are relieved by another "wave-wallower" of the U. S. Lighthouse Service.

WHERE 16TH CENTURY ENGLISH SURVIVES

The farther northward we followed the Banks, the more remote and resourceless seemed

Photograph by Clifton Adams

THE TALLEST TOWER IN THE U. S. LIGHTHOUSE SERVICE: CAPE HATTERAS

Its 80,000-candle-power beam can be seen for a distance of 20 miles at sea. The tower is 193 feet high.

the life of the people. Often it was a mere existence, as of castaways who had taken root on this two-mile width of sand bar, 40 miles offshore. Here is a humorous estimate of Hatteras' social resources as related to us by a native:

"'Long abaaht nineteen and twenty-two a feller come up 'ere—just 'ung araahnd lazy-loike, 'ee did, spoyin' aaht th' loy o' th' land. Folks suspicioned 'im, an' I up an' arsked 'im wot's 'is business araahnd 'ere. 'I'm a criminal,' says 'ee 'thout cracking a smoil. 'Th' judge gaive me the chyce o' 30 days in jail or on Hatteras, and I'm scunnered if I didn't choose Hatteras!'"

By scunnered he meant disgusted. The unchangingness of Hatteras folk is revealed in their daily usage of obsolete, often 16th-century words. "My poke" for "my pocket," to be "consentable" instead of willing, to demand a kiss by saying, "Come buss me!", and to speak of one's sweetheart as "my may," and of a water-dog as a kelpie—all this is perfectly good Shakespeare.

"Hit" for "it," the Anglo-Saxon neuter of "he," is as commonly found in rural North Carolinian speech as in Queen Elizabeth's letters.

When you hear "abashed" for "discredited" and "abraded" for "nauseated," or when a mother affectionately terms her creeping baby an insect, you sense a radical vigor of language, and by the time you learn that on Hatteras molasses, like measles, is a "them," you begin to suspect that your early education was neglected.

WHERE THE WRIGHT BROTHERS LEARNED TO FLY

Beyond Oregon Inlet we gained Nags Head, whose name celebrates those palmy days of professional wrecking when a hobbled horse with a lantern on his head was turned loose on the beach at night to lure ships to their doom.

Farther along, towering 100 feet above the surrounding flatness, rose Kill Devil Hill, the scene of the Wright brothers' flying experiments in 1900-1903. A former lighthouse-keeper, his wife, and a coast guard are the sole remaining witnesses of those now historic events.

Trust a woman for determining that, if those crazy Wright fellows wanted to waste their time and money, at least some of the material could be salvaged! The lighthouse-keeper's wife had sewn the cloth on the first glider, and when the glider of 1902 was abandoned she thriftily refashioned its covering into dresses for her children.

On December 17, 1903, the Wrights having built a motor-driven plane at their workshop under Kill Devil Hill, the unexpected occurred. This is what the old coast guard told us:

"They tossed a coin, and Wilbur won. 'Good luck!' I says, as he climbed into the machine. And 'The Lord only knows!' he says. And then, just as I was telling myself that something heavier than air couldn't and never would fly, that machine rose up and flew 850 feet!"

SCENE OF RALEIGH'S TRAGIC ADVENTURE

We crossed to the "Raonoak" Island of Raleigh's expeditions. With its great oaks and friendly little cottages behind their gardenia hedges, Manteo was, after windswept Hatteras, like a lull after a storm. Amid the simplicity of such surroundings, it was difficult to realize that we stood on ground which, in the annals of English colonization in America, antedates both Plymouth Rock and Jamestown.

Outlining a five-pointed star in the thick of bay-fringing woods, the Raleigh Memorial's boundary stones mark the considerable dimensions of that "high palisade of trees" which was called by its colonist builders of 1585 "the new fort in Virginia" (see illustration, page 477).

Here, while my friend was setting up his camera, I mused on Sir Walter's last expedition: how in 1587 he had dispatched three vessels, some hundred men, 17 women, and 9 children, under John White as "Gouvenour of the Citie of Ralegh, in Virginia."

After arriving on Roanoke Island, the colony was augmented by two births, the mothers being Eleanor Dare and Marjorie Harvie.

As the first English child born on American soil, Virginia Dare's name has outlived almost three and a half centuries—a long fame for a nine-day-old baby; for, with Governor White's departure for England nine days after his granddaughter's birth, Virginia Dare and the Lost Colony pass from history's realm into that of romance.

Photograph from Melville Chater

CHIMNEY ROCK, OVERLOOKING HICKORY NUT GAP: NORTH CAROLINA

This is the first arresting formation as one ascends through the southern part of the piedmont plateau. In the valley a dam is being built to create an artificial lake, with a shore line of 27 miles, as a reserve against drought, as a summer-resort attraction, and for power development.

Photograph by George Masa

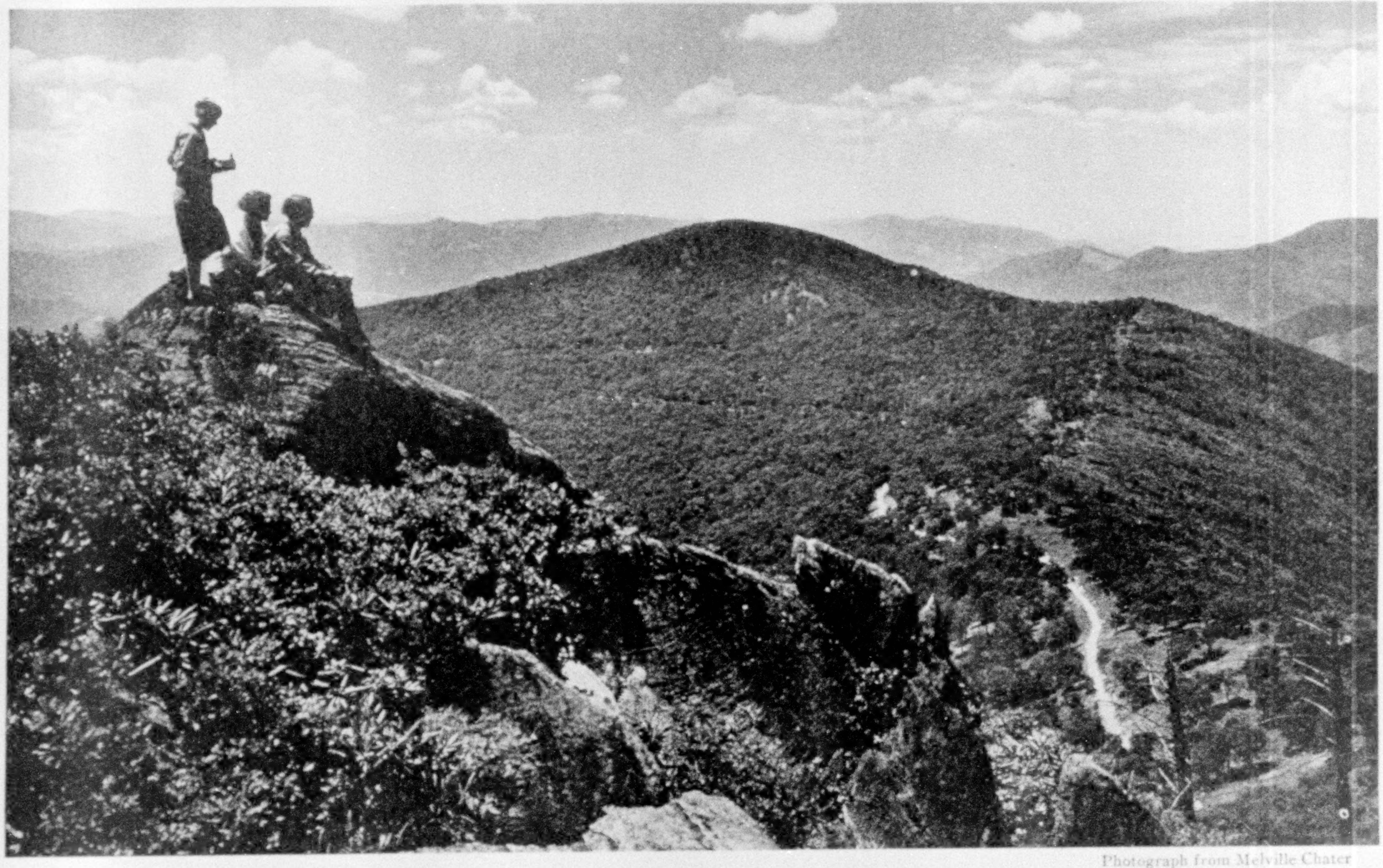
UPPER CREEK FALLS, NEAR COLD SPRING

On a motor-coach tour of western North Carolina one climbs by mountain roads among forest odors, with the thrill of guessed-at streams in one's ears. A few hours' drive farther into the mountains from these falls is Asheville, the gateway to what North Carolinians call the Land of the Sky.

Photograph by Clifton Adams

WORKING AT A KICK WHEEL

This young "Jugtown" potter is a descendant of families that settled near the junction of Moore, Montgomery, and Randolph counties around 1750 (see text, page 509). The jugs and jars thus made are peddled around the countryside in old-fashioned "ware wagons," and in recent years there has been a growing demand for them outside the State.



Photograph from Melville Chater

VIEW FROM MOUNT MITCHELL, 6,711 FEET, THE LOFTIEST PEAK EAST OF THE MISSISSIPPI

From this point of vantage western North Carolina unfolds on a vast scale, dipping away in mountains beyond mountains, fainter and yet more impalpable, toward the distant wisps whose hue gives a name to the entire Blue Ridge.

Photograph by Clifton Adams

IN THE "LAND OF DOING WITHOUT"

This mountain cabin, made of hewn shingles and timbers, with chimney and fireplace of native stone, is the sort made famous by the John Fox school of novelists. Fifteen years ago the North Carolina mountaineers had an illiteracy percentage of 185 in every 1,000, but the modern community school and good roads are relegating illiteracy to the middle-aged. Life here, near Marion, is so primitive that the region has been well called "The Land of Doing Without." A mountaineer generally handles not more than $300 cash in an entire year.

Photograph by Clifton Adams

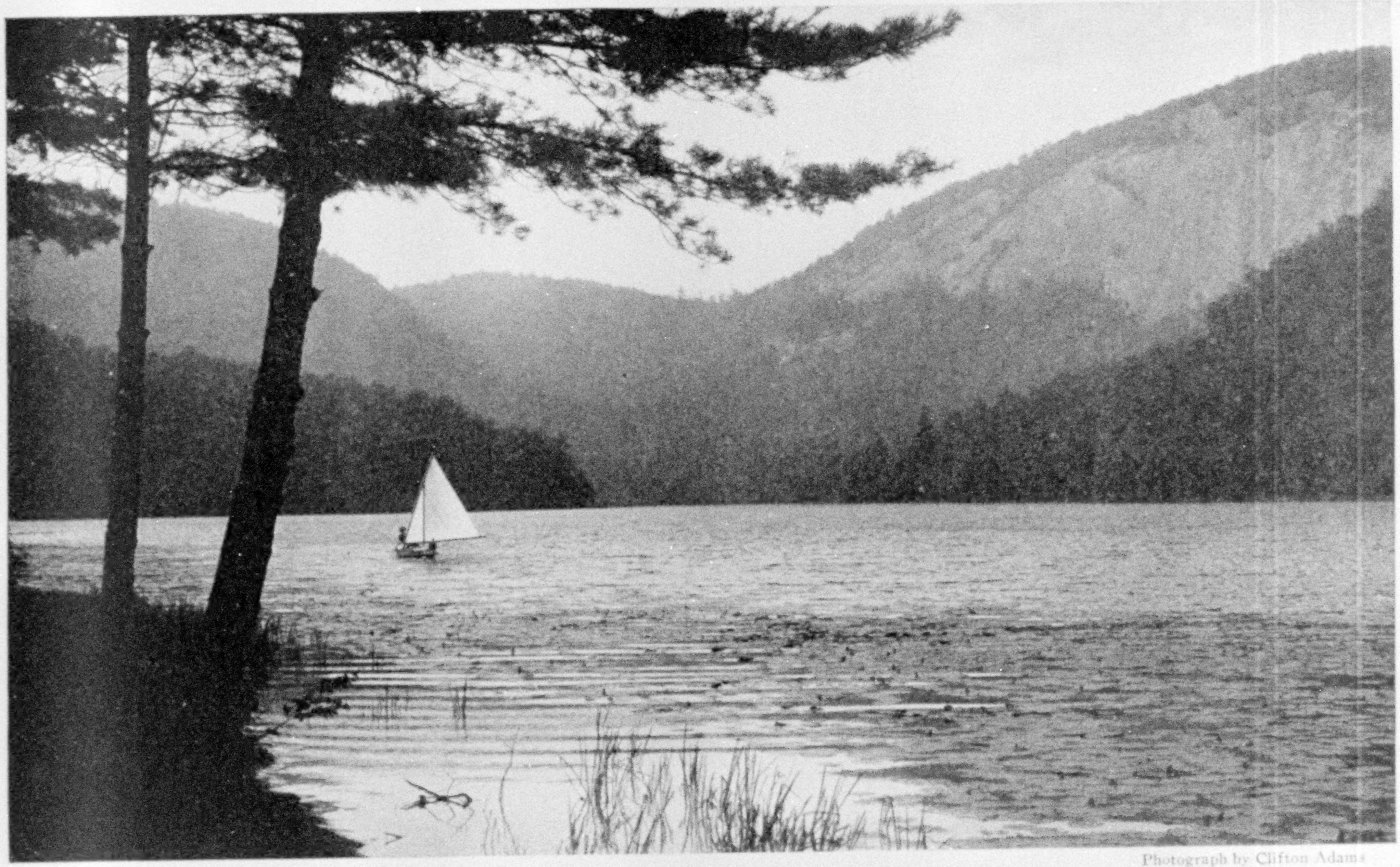
A VICTIM OF THE HATTERAS BANKS

Wreck of the four-master *Martha Spencer.* In this section of North Carolina there is a grim joke to the effect that Hatteras' chief import is wrecks. Along these sand spits the traveler, by glimpses of propellers, capstans, and deck houses, can trace the forms of great broken-back vessels, as paleontologists reconstruct the skeletons of prehistoric monsters (see text, pages 481-482).

Photograph by Clifton Adams

LIVE OAKS FESTOONED WITH MOSS: MASONBORO SOUND

The live oak is the only tree harboring this decorative growth which is not eventually killed by it. After the fiber has been cured it is used as a stuffing for pillows and mattresses.



Photograph by Clifton Adams

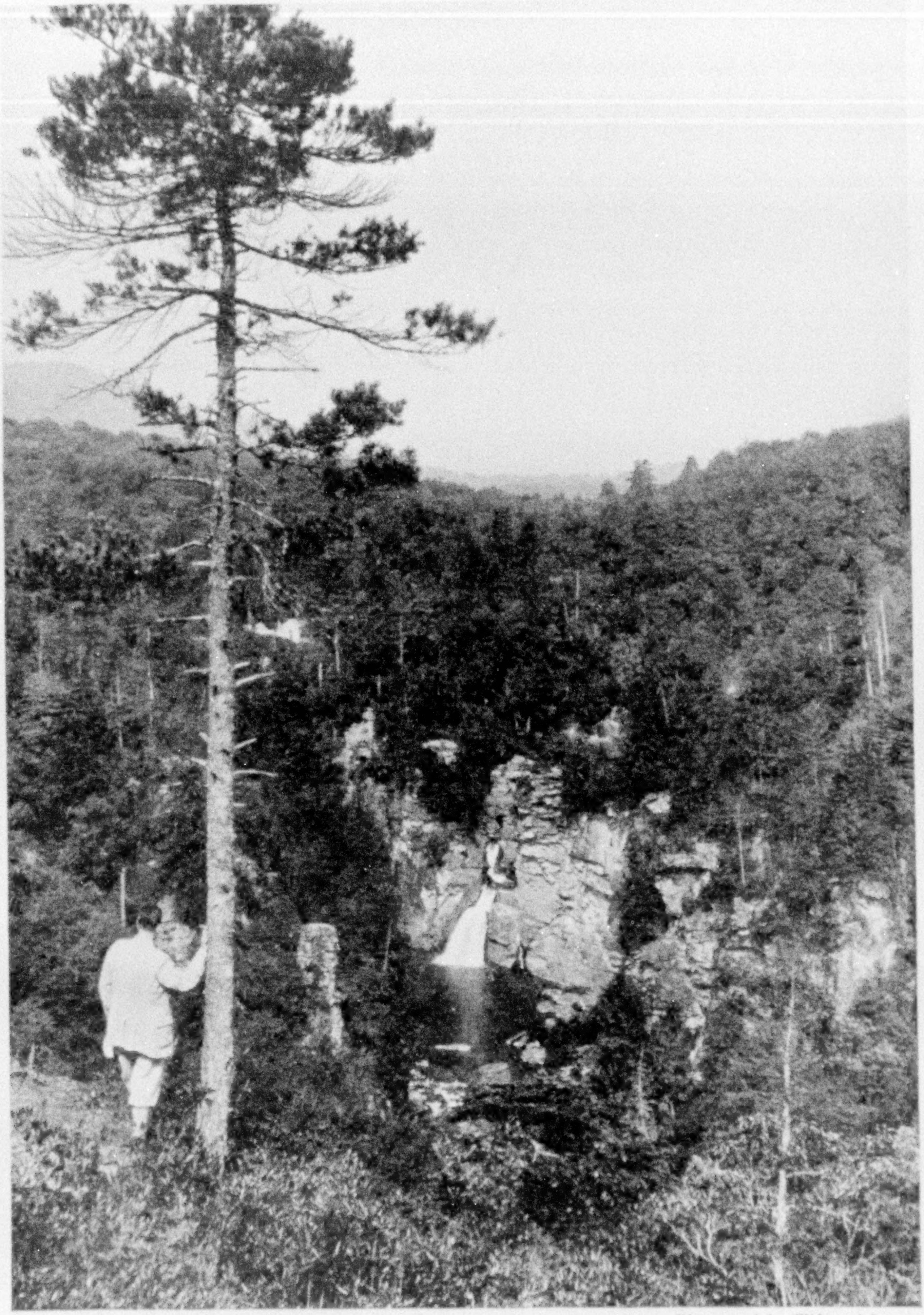
LAKE FAIRFIELD, NEAR SAPPHIRE, SURROUNDED BY SUMMER HOMES AND CAMPS

These lovely bodies of water in the mountains are in striking contrast to the 15 comparatively small lakes in the eastern part of the State, the largest of the latter being the shallow Mattamuskeet, 15 miles long.

Photograph by Clifton Adams

"NURSERY" TERRAPINS

This photograph, taken at the Biological Station of the U. S. Bureau of Fisheries at Beaufort, shows 713 nine-months' old delicacies for epicures (see text, page 475). North Carolina's fisheries rank second among the South Atlantic States and contribute one-tenth of the national catch, yielding $2,500,000 a year.



Photograph by Clifton Adams

LINVILLE FALLS, IN THE BLUE RIDGE MOUNTAINS

Rhododendron, galax, mountain laurel, and azalea are shipped in quantities to northern cities from Linville, which is one of the oldest resorts in the Land of the Sky (see, also, illustration, page 486). The scenic center of the district, Grandfather Mountain, which forms the rugged apex of the Blue Ridge, is but slightly lower than the State's topmost peak, Mount Mitchell (see illustration, page 488).

Photograph by Clifton Adams

DEMONSTRATORS OF OLD-WORLD FARMING SKILL

There are five demonstration-farm colonies in North Carolina—at Saint Helena, Castle Hayne, Van Eden, Delco, and Artesia. The colonists, including Belgians, Hollanders, Germans, Danes, north Italians, Hungarians, Poles, Slovaks, Bulgars, Russians, French, and Austrians, are mixed, not settled by nationalities. These children are members of a large Danish family at Saint Helena (see, also, illustrations, pages 504 and 506).

Photograph by Clifton Adams

WHERE THE CONFEDERACY'S FATE WAS SEALED

Fort Fisher, near Wilmington, was stormed in December, 1864, and on January 13, 1865, by 10,000 Union troops and 58 warships. It fell on January 15, and thereby the South's last line of communication was cut.

Photograph from Melville Chater

GATHERING NORTH CAROLINA'S THIRD RICHEST CROP

While the turpentine products of her pine forests are on the decline, the State is still rich in timber resources. Its three belts are: the coastal plain (upland forests chiefly of pine), the piedmont plateau (pine forests mixed with hardwoods), and the mountains (hardwoods, but no pine). North Carolina has 24 varieties of oaks, eight of the nine known varieties of hickory, all of the maple, linden, and magnolia varieties known in the Eastern States, and eight varieties of pine out of eleven. Fifty-seven of the State's trees are listed as "of great economic value." The State's lumber products are worth $168,000,000 a year, or third in value after its textiles and manufactured tobacco. Economists have sounded the warning that the annual cut is double the annual tree growth, and that $1,250,000 goes up yearly in the smoke of forest fires.

Photograph by Wootten-Moulton

HARVESTING TOBACCO NEAR NEW BERN

In a favorable year North Carolina produces as much as 140,000 tons of leaf tobacco, or between one-fourth and one-fifth of the national crop, with only Kentucky exceeding her.

Photograph by Clifton Adams

WILD HORSES OF THE CAROLINA DUNES

These kicking and squealing ponies have just been herded into Diamond Pen, Beaufort Banks. They are to be disinfected and selected for auctioning, and the foals are to be branded (see text, page 476, and illustrations, pages 480, 481, and 482).

Photograph by Clifton Adams

FOREFATHER OF NORTH CAROLINA'S PRESENT-DAY HYDROELECTRIC SYSTEM

North Carolina's transition from water-mill to turbine has taken place within the last 25 years. Her rivers have an average fall of 10 feet per mile, and, measured in terms of minimum potential water power, she ranks second to New York among the States east of the Mississippi.

With the Great Armada impending and the consequent impressing of all English vessels into war service, communication with the little overseas colony was cut off for a time, but after Spain's maritime power had been shattered, White sailed again for Virginia. Instead of colonists he found, where the memorial stands to-day, evidences of a "secret token" whereby, if they had moved elsewhere, the colonists were to carve the name of their destination on a tree, indicating distress by adding the sign of the cross; for, near the deserted palisade, "on one of the chiefe trees, in fayre capitall letters, was graven CROATAN, without any crosse or signe of distresse" (see page 477).

THE LOST COLONY IS STILL ONE OF HISTORY'S MYSTERIES

Though White was "greatly joyed" at this "certaine token" that the colonists were safe among the friendly Indians at near-by Croatan, imperative conditions caused his return to England without following up the clue. Thereafter repeated search expeditions, persevered in for 12 years, yielded no trace of the Lost Colony.

Was massacre or intermarriage the fate of that intrepid handful of English men and women who vanished in the wilderness?

Thirteen years later travelers heard that they were living along the banks of the Neuse; forty years still later one John Lawson was told by Croatan Indians that they were descended from white men; and in 1715 settlers gaining the mid-section of North Carolina found the ancestors of the present-day Croatans plowing, holding slaves, and speaking English. Finally, the modern Croatans themselves, using an archaic English and in many cases bearing the surnames of those who disappeared from Roanoke, claim descent from the Lost Colony.

As for the ill-starred Raleigh—his fortune exhausted, himself attainted for treason, his colonial proprietorship escheated to the Crown—he valiantly declared of Virginia, "I shall yet live to see it an English nation," and died in the faith of his dream.

Seventy-six years after the fade-out of the Lost Colony, Charles II elevated eight of his courtiers into Lords Proprietors over a vast, vaguely defined territory, naming it after himself, Carolina.

Adventurous spirits from the already successful colony at Jamestown settled along the Chowan River; Barbadian English settled along the Cape Fear, and Germans, French, and Scotch-Irish, arriving between 1711-1725, constituted Carolina's third nucleus.

After sixty-odd years of mere exploitation, and having encountered rebellions over tobacco taxes and the ousting of various unscrupulous governors, some of whom were actually leagued with such notorious pirates as Edward Teach ("Blackbeard"), the Lords Proprietors sold Carolina back to the Crown for about $112,500.

The Crown had no better luck. In 1765 the people of Wilmington frustrated the Stamp Act by arresting the local stamp master. Twice prior to the Declaration of Independence the North Carolinians held their own dress rehearsals for that event—the first in the Mecklenburg Resolution of 1775, the second when their delegates at the Congress of Halifax, eleven months later, declared for self-government. And finally, the ladies of Edenton held a most unladylike tea party.

THE TEAPOT WHICH HELPED TO BREW A REVOLUTION

In that still atmospherically colonial town the aforesaid ladies gathered at Mistress Elizabeth King's mansion on October 25, 1774. There they dumped out their caddies and stamped the tea underfoot. "We do hereby solemnly engage," so ran their written declaration, "not to conform to that Pernicious Custom of Drinking Tea," and not to patronize "ye wear of any manufacture from England until all Acts which tend to enslave this our Native Country shall be repealed."

Thereafter dried raspberry leaves supplanted bohea, and Mrs. Winifred Hoskins initiated the dress-goods boycott by having her wedding gown spun and woven from local flax. And to-day the presence of a bronze colonial tea urn topping a Revolutionary cannon on the site of the Edenton Tea Party calls for some poet's pen to balladize the teapot which helped to brew a revolution.

Photograph by Clifton Adams

SURFBOAT DRILL: CAPE HATTERAS COAST GUARD STATION

memorialize the closing days of the Civil War (see page 496).

At Wilmington centers the State's railroad history. Its earliest "fast-freight" service comprised a system of plank roads over which six-horse teams drew canvas-covered wagons to the head of navigation at Fayetteville.

About 1830 "Railway meetin' to-night!" was first announced to Wilmington's stockholders by a bell-ringing Negro astride a mule, and in 1840 the Wilmington and Weldon Railroad, with 180 miles of trackage, 12 locomotives, and 58 cars, was opened with a barbecue and a salute of guns.

The timid public was assured that "the trains will not run after dark," and those fearless spirits who made the trip were rewarded by their ladies' receiving bouquets upon alighting at Wilmington.

The fine old town of Wilmington offers mellow glimpses of its past along the Cape Fear River and vivid scenes of resort life on the near-by beaches. Its river recalls the thrill of Civil War blockade-running under Union shellfire, while the stately white columns aglimmer from among the banks' moss-hung live oaks tell of colonial mansions and old plantation days.

A short motor drive through the pines leads one to the beach resorts, whither tens of thousands of visitors flock each season for bathing, yachting, motor-boat racing, or merely to laze between sound and ocean on the outstretched sands.

The splendid 25-mile beach terminates toward Cape Fear in a series of bleared mounds, once Confederate batteries, which

Yet the State's future as a truck garden for the North was potentially present in those cumbrous, wood-burning locomotives.

Nowadays European restaurants can serve you with North Carolina's peaches, Canadian markets with its watermelons, Maine resorts with its strawberries. Its many other garden products reach Jacksonville, New York, and Chicago in from 36 to 90 hours after they are picked.

FOREIGN FARMERS IMPORTED TO SPECIALIZE IN THEIR NATIVE LINES

A stimulating factor in the State's truck industry is seen in Wilmington's demonstration colonies. Inaugurated some 20 years ago, they consist of hand-picked

Photograph by Clifton Adams

GETTING A BEARING BY RADIO COMPASS FOR A SHIP AT SEA: HATTERAS BANKS

"Where am I?" wirelesses some vessel off the shoals to the Hatteras operator, who, while the message is coming in, turns to and fro a device resembling a steering wheel marked with the degrees of the compass. He notes that the fluctuating message "fades out" when this compass wheel indicates, say, 60 degrees, and that the sound augments at 50. Thereupon he stretches a string across the face of a chart from Hatteras to the average obtained, namely, to 55 degrees. He then wirelesses Virginia Beach to get a like bearing on the same ship, and, upon receiving the answer, stretches a second string across the chart from Virginia Beach to the degree its operator has obtained. At the intersection of the two strings will be found the ship's exact bearings. The whole operation has occupied but a few moments, and the distant skipper goes on his way reassured.

farming families from various parts of Europe. Of the 12 nationalities represented on some 3,000 acres, each was selected for its Old World specialty—the Hollanders for bulb culture and nurseries, the north Italians for vineyards and small fruit, the Danes for dairy farming, and so forth (see illustrations, pages 495, 504, and 506).

The arriving colonist-family starts with 10 to 20 cleared acres and a house, with coöperatively owned motor machinery and coöperative marketing channels at its service, and the counsels of an agricultural adviser and a social-service worker. Not uncommonly these families are raising their own garden food and shipping their first crops within 90 days of arrival. They have become landed proprietors, subject to installment payments, contributing their particular national excellence to American agriculture.

"WHOA!" AND "GIDDAP!" ARE BECOMING OBSOLETE

The morning coach picked us up at our hotel for the 200-mile trip to Charlotte. As the black asphalt flew by, with regularly placed signs of direction or warning, we realized that "Whoa!" and "Giddap!" are dying words in North Carolina. Somebody had waved a wand and pronounced that powerful spell, *"Good roads!"* whereat horses had changed to horsepower and nosebags to gasoline.

Back in 1912, when only one North Carolinian in 380 owned a motor vehicle, the then-existing roads answered the needs of the day—answered, that is, in the sense that the single log across a

Photograph by Clifton Adams

A HOLLANDER AT A CASTLE HAYNE DEMONSTRATION FARM IS HELPING TO SOLVE THE NARCISSUS-BULB SHORTAGE

More than 140,000,000 narcissus bulbs were brought into the United States last year, but in the effort to stamp out certain plant diseases a Federal embargo against such importations went into effect on January 1. The bulb-growing industry of North Carolina, therefore, seems destined to thrive.

Photograph by Clifton Adams

A PEACH ORCHARD IN THE SAND HILLS REGION WHICH PRODUCES A CARLOAD OF FRUIT PER ACRE

One such orchard in North Carolina covers 40 square miles. In 1924 North Carolina's farmers shipped more than 1,000 tons of fruit and truck each 24 hours throughout the State's growing season of 250 days.

Photograph by Clifton Adams

GATHERING THEIR FIRST CUCUMBER CROP IN AMERICA

These Danish girls are among the colonists settled on one of North Carolina's five demonstration farms (see, also, pages 495 and 504).

North Carolina mountain stream then answered as a footbridge. They got you somewhere, no matter how.

In 1921 the State legislature authorized $50,000,000 worth of road bonds. Today the bond issues total $85,000,000.

The State Highways Commission is spending annually $16 per capita, or twice the national average in road expenditure. It is completing yearly 1,000 miles of hard-surface thoroughfares, which serve the enormously increased traffic of one motor-vehicle to every eight citizens. This modern road system, exceeding 6,000 miles, costs the motorist 2½ cents per day, payable in gasoline tax and horse-power tax.

THE TARHEEL STATE'S TAR HAS VANISHED

Two lines drawn southwestward across the map of North Carolina—one from Mount Airy to Rutherfordton, the other from Roanoke Rapids to Hamlet—roughly demark the State's mountain area, its piedmont or foothills section, and—what we were now traversing—the coastal plain.

Photograph by Clifton Adams

PICKING PEACHES NEAR ABERDEEN

From North Carolina's great orchards there was shipped throughout the working hours of August, 1923, one carload of peaches every four minutes. These fruit gatherers have come over the border from Kentucky for the harvest season.

The latter's omnipresent fringe of evergreen along the sky line is an insistent reminder that North Carolina grew up in the pine woods. But question any old lumberjack and he will laugh: "*Them* ain't woods! We're still getting out a right smart o' cypress and gum trees, but the long-leaf pine is finished." Indeed, scarcely could we find a pinetar kiln in this, the Tarheel, State.

Yet the long-leaf pine was North Carolina's first important resource. Instructions drafted in 1610 informed prospective colonists that "Pyne trees are to be wounded within a yarde of the grounde, and that wych yssues owte wilbe Turpentyne." Exactly a century later a memorial was presented at Whitehall by some would-be concessionaire who proposed "furnishing Her Majesty's navy with tar from North Carolina." From that moment, and indirectly because England wished to be independent of the Baltic countries for ship's stores, North Carolinians were destined to be known as Tarheelers.

Wilmington became the greatest naval stores port in the world. From 1870 to 1880 its annual exportation of pine products not infrequently reached 300,000 barrels; but in 1885 the trek of the turpentiners to Georgia announced that King Pine's 200-year reign in North Carolina had drawn to a close.

AMONG THE POTTERS OF THE THREE COUNTIES

A side trip from Pinehurst, the State's chief resort for golf enthusiasts, to the

Photograph by Clifton Adams

A HANDMADE CABIN, INCLUDING SHINGLES, HEWN BOARDS, AND CHIMNEY: CHEROKEE INDIAN RESERVATION

Save for the governmental school properties, the 65,000 acres which the Cherokees occupy are tribally owned lands. The schools are graded up to the standards of admission to many colleges.

junction of Moore, Montgomery, and Randolph counties landed us in a wooded section whose homes were so remotely placed that we called its people the back-roads folks.

"Jugtown" is their way of describing this as a pottery district. Certainly, the people of the Five Towns are not more individual than those of the Three Counties. Their potter ancestors from Staffordshire, England, settled here in 1750—settled with a firmness of resolve apparent in their descendants, who will tell you, "An' we ain't budged sence."

This refusal to budge is in part due to local deposits of gravel-free clay, for slicing and hand-picking remain their primitive means of preparing it for the kick wheel (see page 487).

Surrounded by their homemade furniture of the pioneer era and living unchanged within the changeless pine woods, they pass the craft on from grandfather to son and grandson.

The potter's prayer is, "Oh Lord, lead our feet out o' the mud and onto the clean clay o' Thy grace!" And when they are laid by their forefathers, it is literally in a "potter's field," whose headstones consist of inverted, cone-shaped jars, turned on the wheel, bearing roughly scratched inscriptions.

THE STATE NO LONGER LACKS A PRESS AGENT

We regained the main routes and were picked up by another motor coach. Gracious contours, rising from the plain, resolved themselves into vistas of rolling landscape, while the pine-fringed horizon gave way to sky lines broken by mauve mountains, the footstools of the Blue Ridge. And now we crossed a river by cable ferry whose overhead wire supplied motive power from the stream. In fact, we had entered the piedmont, or foothills, country, with its hydroelectric stations and related industries (see pages 520 and 521).

North Carolina is passing through a renaissance. Due to her steadily intensifying shift from cotton fields to mill centers and from once-idle streams to throbbing dynamos, she has suddenly rediscovered herself on the threshold of industrial power.

The legendary North Carolinian who in the 'sixties called his three daughters Rosin, Tar, and Turpentine would to-day be naming them after cigarette brands, furniture trademarks, and cotton-goods patterns.

Charlotte, situated between the big hydroelectric developments along the Catawba and Yadkin rivers, is a plexus of this new industrialism. In the last 25 years the number of textile mills operating within a 100-mile radius of that city has increased fivefold, with a present spindleage of 10,000,000.

Charlotte was one of the first Southern cities to figure at the Nation's birth and one of the last to figure in the passing of the Confederacy. On May 20, 1775, resolutions dissolving political bonds with Great Britain were read from the courthouse steps. And it was at Charlotte, on April 20, 1865, that Jefferson Davis and his cabinet met for the last time.

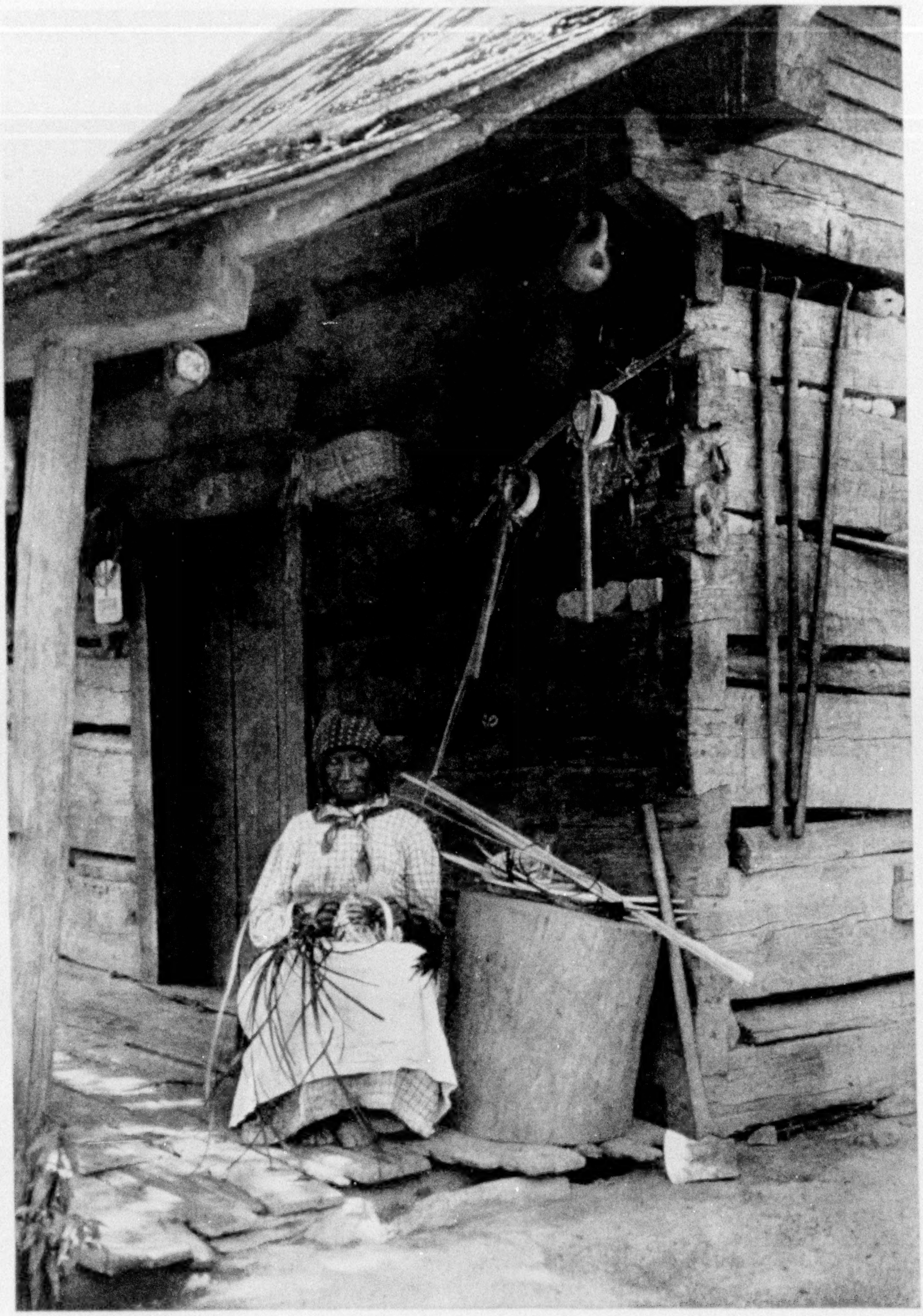
COMFORT AND HUMOR IN MOTOR-COACH TRAVEL

By now we were confirmed motor-coach "fans." You break your journey where you will and sight-see for as long as you want, with the comforting knowledge that at almost any hour you can climb on another big coach and continue your journey until, attracted by some passing town, you decide to drop off again.

An hour's ride beyond Charlotte we entered Gastonia, one of the largest textile centers in the United States. Of its 20,000 people, about three-fourths are workers in the 42 mills whose tall stacks cut the sky. Yet, in the town's broad, tree-shaded streets, lined with neat cottages on well-kept, flower-fringed plots, one felt no oppressive sense of concentrated industry, but rather the restfulness of some model suburb, wide-spread to sun, air, and surrounding countryside.

With mill workers' cottages rentable at $3 a month, with water and electric light free, and a mild climate, necessitating little fuel, which is obtainable at cost, it is not uncommon for mountain families to work at Gastonia long enough to pay off their farm mortgage and then return to the Blue Ridge.

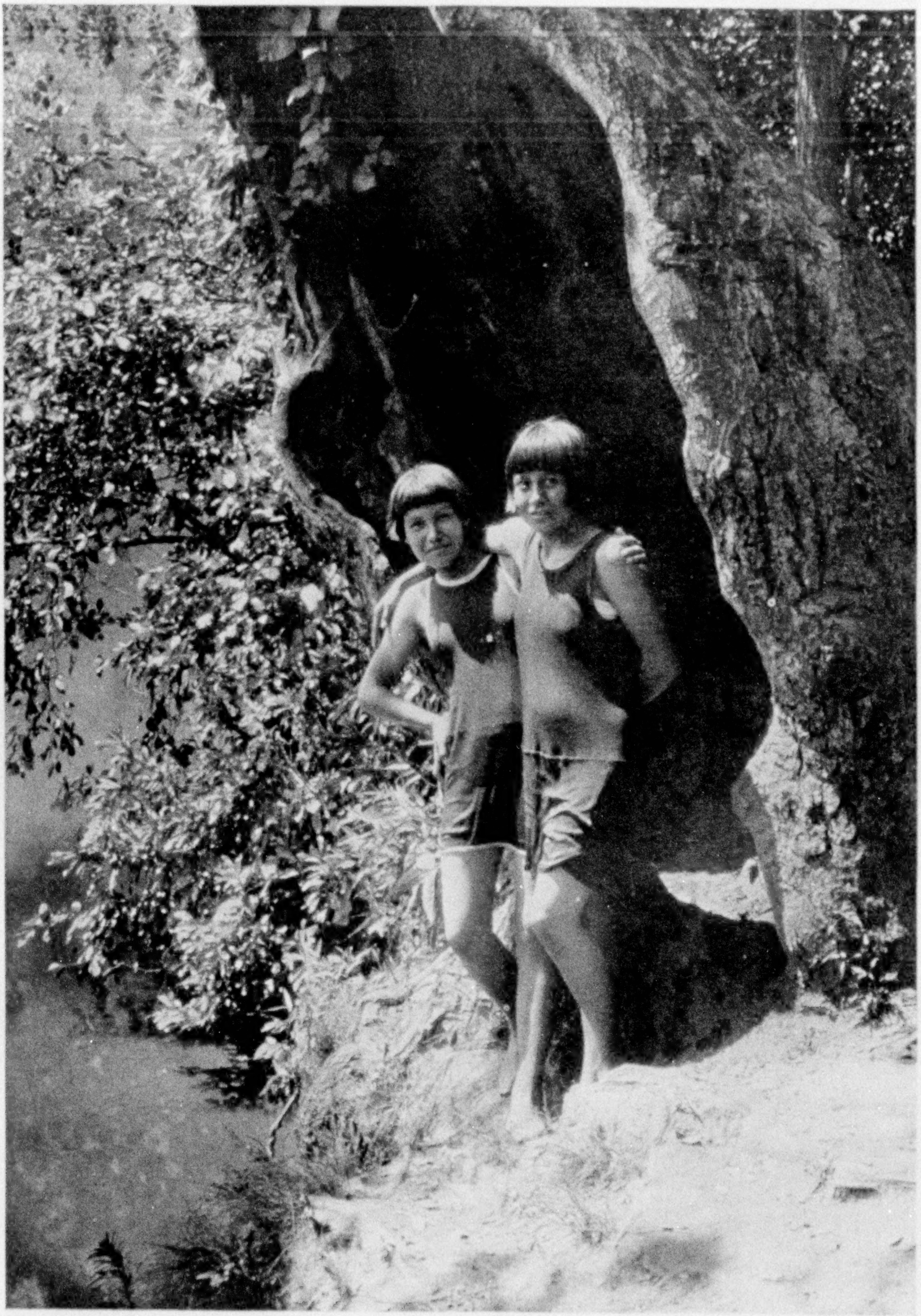
Gaston County contains 98 textile mills, which represent one-sixth of the State's



Photograph by Clifton Adams

VENERABLE AUNT LYDIA MAKES BASKETS OUT OF OAK SPLITS

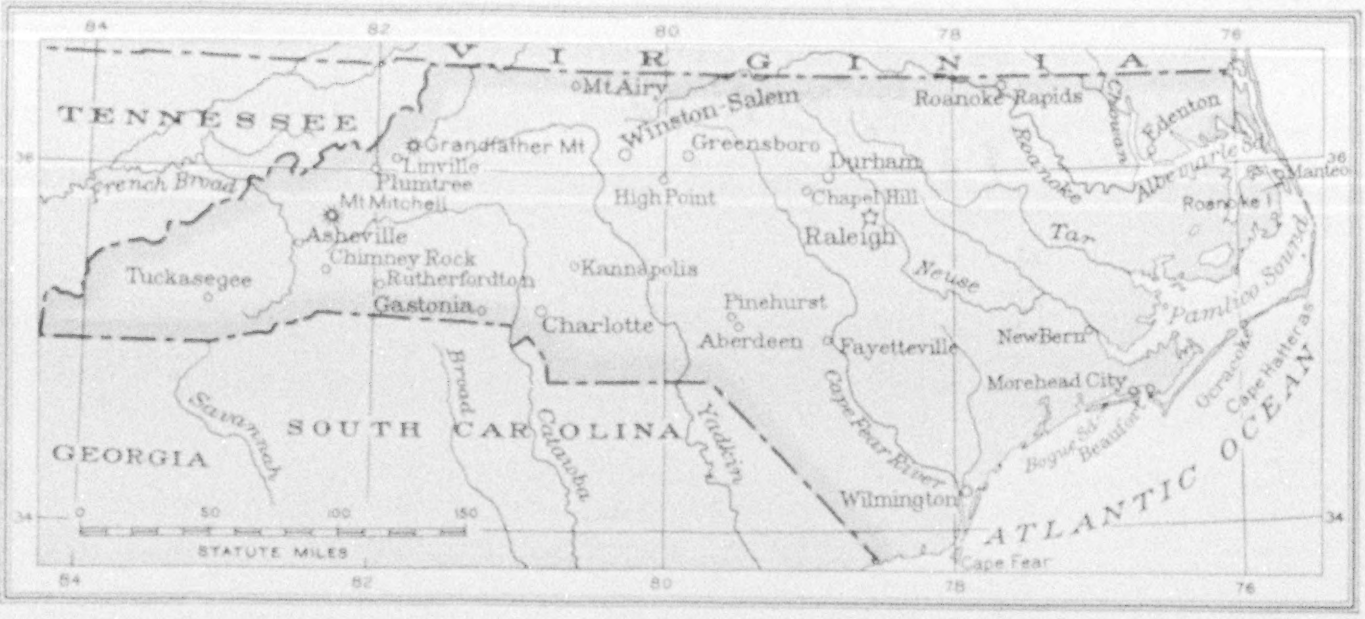
The big block is the mortar of black-gum wood on which she grinds her corn into meal. Aunt Lydia, who lives on the Cherokee Indian Reservation, near Cherokee, at the foot of the Great Smoky Mountains, also makes Indian ball rackets, for there are two hanging over her head.



Photograph by Clifton Adams

INDIAN SCHOOL GIRLS ON NORTH CAROLINA'S CHEROKEE RESERVATION

If there is anything in example, these students should excel, for it was Sequoya, a Cherokee mixed-blood, who reduced his tribe's language to 84 written characters, the only syllabary ever invented by a North American Indian for his people. The Big Trees of California (*Sequoia gigantea* and *Sequoia sempervirens*) and the Sequoia National Park were named in his honor.



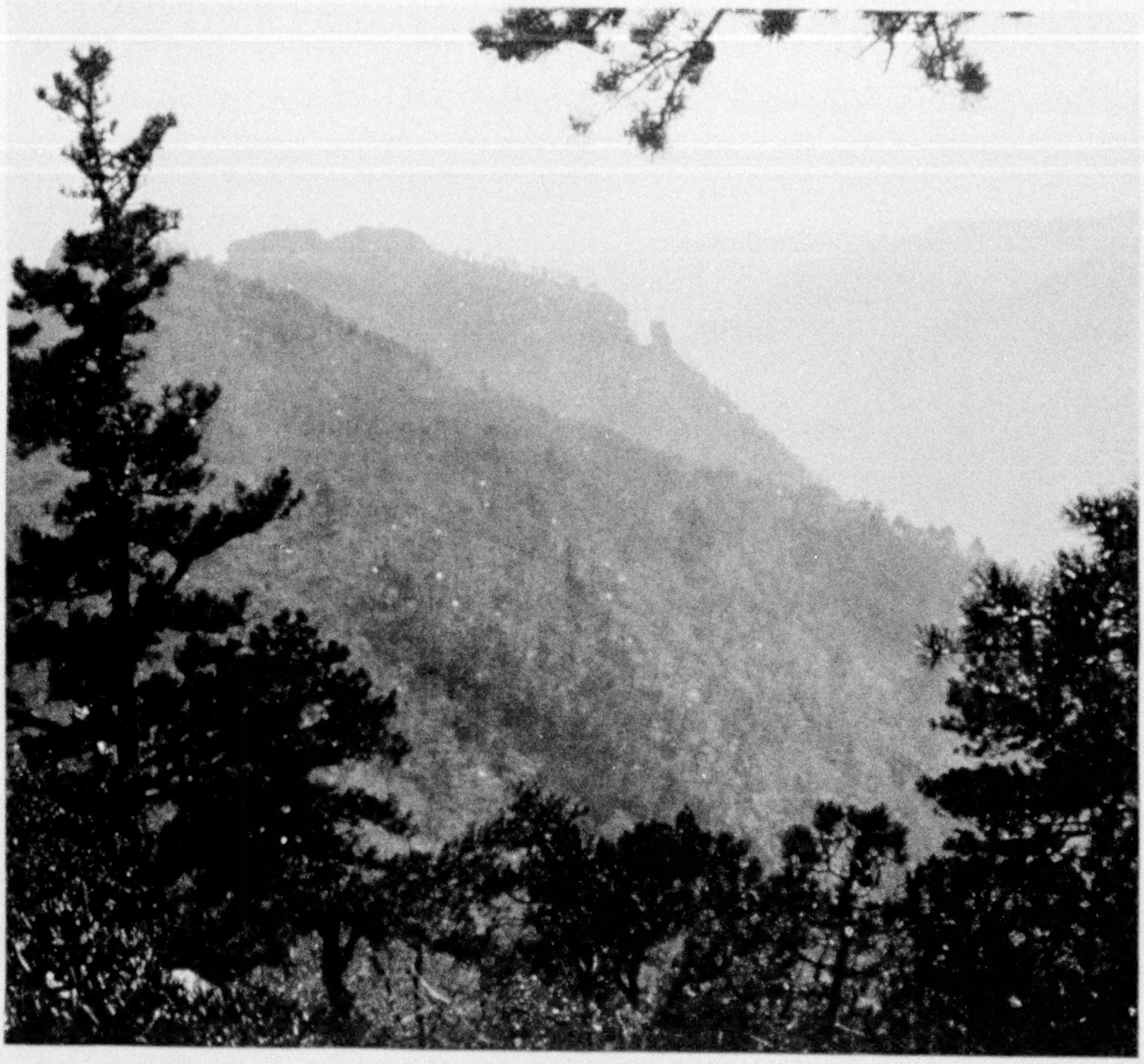
Drawn by A. H. Bumstead

A SKETCH MAP OF NORTH CAROLINA

A wall map of North Carolina, South Carolina, and Georgia, in six colors, will be issued as a supplement with an early number of the NATIONAL GEOGRAPHIC MAGAZINE.

Photograph by Edwin Levick

RIDING TO HOUNDS AT THE PINEHURST HORSE SHOW



Photograph by George Masa

CHIMNEY ROCK FROM TABLE ROCK MOUNTAIN

total spindleage and consume almost one-third of her cotton crop.

Beyond Gastonia hardy crops appeared, while cotton fields and cotton gins became correspondingly less.

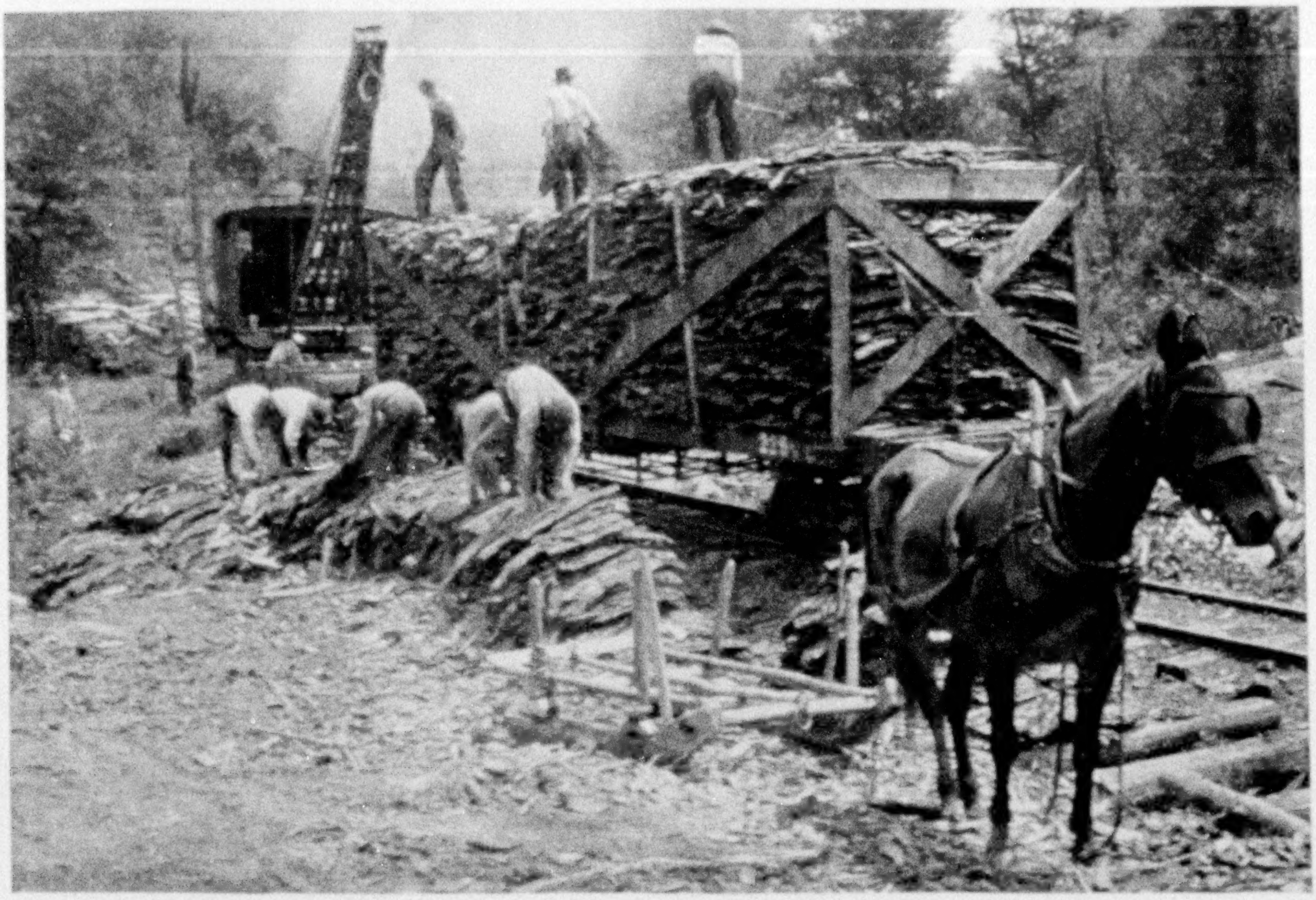
OVER MOUNTAIN ROADS TO A FROSTFREE THERMAL BELT

Night fell as we climbed by mountain roads among forest odors and with the thrill of guessed-at streams in our ears. At last we alighted at a chaletlike inn amid the curiously mild air of a frostfree thermal belt. Next morning we found ourselves atop the great obelisk of Chimney Rock, whose cottagers are well named the Cliff Dwellers, looking down into the magnificent Hickory Nut Gap (see illustration, page 485).

A distant speck in the valley represented the slowly rising dam that will inclose an artificial lake 27 miles around. Thus, link by link a lake system for recreation and as a reserve against drought is being constructed along the streams of western North Carolina.

A few hours' drive farther into the mountains brought us to Asheville, the gateway to what North Carolinians have well named the Land of the Sky. Never was an altitude of half a mile above sea-level so unobvious, in all but the tonic atmosphere. Set in a vast bowl, Asheville is encircled by mountains whose 20 highest peaks top all altitudes in the Eastern States. Could the Titans return, they might appropriately seat themselves on the surrounding crests of this mammoth amphitheater as spectators of one of Asheville's big golf or tennis meets.

It was on the Biltmore estate, near Asheville, that, with the founding of a



Photograph by Clifton Adams

LOADING HEMLOCK BARK USED IN TANNING: NEAR LINVILLE

forestry school, the first steps in American forest conservation were taken.

To-day there are established in this region, for the protection of watersheds and hardwood reserves, the Cherokee, Nantahala, Unaka, and Pisgah national forests. With a boundary which incloses more than 1,700,000 acres, the Government had acquired up to July, 1925, somewhat less than a fourth of this area. In the Pisgah, established in 1916 as a game preserve, native bear and leer roam, trout streams are stocked, and herds of bison and elk have been implanted.

Surrounded by the modishness of Asheville, one scarcely realizes that only 50 miles away mountaineers are living a ruggedly simple existence behind handhewn timbers and on small "switchback" farms, with Revolutionary looms and spinning-wheels alongside their chimney pieces of native rock (see page 489).

It was a farseeing woman from among the "boiled-shirt" life of Asheville who persuaded these remote, almost forgotten, mountain folk to set their long-idle looms going again. To-day there are half a dozen handicraft centers scattered through western North Carolina.

A 75-mile stretch of ideal motor-coaching up the foaming course of the Tuckasegee River took us past the big paper-pulp and acid-wood plants to the Cherokee Indian Reservation at the foot of the Great Smoky Mountains (pp. 508-10-11).

AMONG THE GREAT SMOKY MOUNTAINS

A Tsalagi (Cherokee) legend tells of how the great buzzard, sent forth to scout after the Flood, became exhausted upon reaching the Smokies, and that wherever his wings smote the earth a valley appeared, peaks remaining wherever he soared.

Nothing could better convey a picture of this wild region, with its abruptly alternate heights and depths. For 40 miles in an airline along the Great Smokies' crests, and from 25 to 30 miles as measured over them from North Carolina into Tennessee, all is primitive, uninhabited forest, such as the post-diluvian buzzard beheld.

In 1540 Ferdinand de Soto found the Cherokees living along the Appalachian range in regions which are now incorporated in eight States. Three centuries later, when the remnants of this once-powerful tribe were transferred to Indian Territory, some few thousands of them

Photograph by Clifton Adams

A TANDEM RIDE IN A LOGGING CAMP

The "skidder" has pulled a gum-tree log containing 400 feet of lumber out of the swamp and is loading it on a flat car, near Wilmington. Gum-tree lumber is used for veneering.

Photograph by Clifton Adams

A "LOOPER" PUTTING TOES ON WOMEN'S HOSIERY

The claim is made that "Durham has the largest hosiery mill in the world." Among North Carolina's other "largest" claims in textiles are: largest towel mill in the world, at Kannapolis; largest denims mill in the world, at Greensboro (see page 520); largest damask mill in the world, at Roanoke Rapids, and the largest underwear factory in the United States, at Winston-Salem.

took refuge in the Great Smokies. Ultimately, with the Government's coöperation, they settled on their present lands.

Nowadays there are some 2,600 members of the Eastern Band of Cherokees living under the Great Smokies.

A four-hour drive up the mountains from Asheville to Linville gave us another glimpse of that "back of beyond" region which fringes western North Carolina. Here were pioneer cabins miles apart, streams fordable by a plank stretched between two tree-forks, occasional covered wagons with rifles slung inside, and dry-land sledges being used on "switchback" farms.

This is a country steep enough to justify the old joke about the mountaineer who broke his leg by falling out of his cornfield and poor enough to justify that other stock joke about the would-be purchaser of a mountain farm who found

Photograph by Clifton Adams

COMPRESSING COTTON FOR SHIPMENT

North Carolina's bumper cotton crop was 1,000,000 bales in 1923, when only Texas surpassed her. Yet such is the growth of her textile industry that the State must import for her mills about 100,000 tons more than she can raise.

thereon the tombstone of the man who had starved while trying to cultivate it.

THE BROWN MOUNTAIN LIGHT MYSTERY

From three points near Linville there may be witnessed a curious and, some North Carolinians insist, as yet unexplained phenomenon, known as the Brown Mountain Lights. These appear with fairly dependable regularity and at all seasons, especially on dark nights. They have been variously described as "globular, glowingly red, like toy fire-balloons," or "a pale, white light with a faint halo around it," or "not unlike the 'star' from a bursting skyrocket."

As a rule, they appear singly in succession, rising over Brown Mountain's level ridge, then suddenly winking out. Often several lights appear simultaneously. While their average duration is from 15 to 60 seconds, they have been seen stationary over the ridge for 10 and even 20 minutes before extinguishment.

While the first journalistic account of the phenomenon appeared in 1913, the claim is made locally that these lights have puzzled observers since before the Civil War. In 1921 physicists of the U. S. Weather Bureau suggested, without actual observation, that these glow-balls might be akin to the so-called Andes light. Other theories have credited them to phosphorescent or radium emanations, lights from moonshine stills, St. Elmo's Fire, mirage, and locomotive or motor-car headlights.

Instrumental observations made by the U. S. Geological Survey in 1922 from three points overlooking Brown Mountain resulted in the opinion that, of the phenomena then witnessed, 47 per cent were caused by motor-car headlights, 33

Photograph by Clifton Adams

CUTTING MICA INTO TWO-INCH SQUARES: PLUMTREE, NORTH CAROLINA

Muscovite mica is found in the western part of North Carolina, usually in rough crystals, called blocks or "books," which can be split into sheets an inch or more in diameter, for use in lamps or as inspection plates on internal-combustion engines. Mica is also ground into flour and used in the manufacture of wall paper and lubricants.

per cent by locomotive headlights, 10 per cent by stationary lights, and 10 per cent by brush fires.

On the other hand, local opinion claims that the phenomena have not as yet been satisfactorily accounted for. Certainly, summer visitors at Linville and Blowing Rock find it a fascinating experience to watch, at evening, the spectacle of lights mysteriously popping out and as mysteriously disappearing, in the Catawba Valley.

ILLITERACY AMONG MOUNTAIN FOLK IS DISAPPEARING

Mountain illiteracy in North Carolina is passing rapidly. In the last 15 years the state-wide ratio has dropped from 185 to 135 illiterates in every 1,000.

Of late years about 4,000 one-teacher schools have been scrapped for modern-type buildings, and North Carolina's educational budget has risen to $11 per capita, or exactly midway between the per capita cost of $8, as averaged throughout the Southern States, and $14 throughout the Nation. Not so much can be said of her pay standards, which rank fifth from the bottom among 15 Southern States.

Shakespeare's description of the urchin "creeping like snail unwillingly to school" lost its appropriateness in North Carolina 10 years ago, when the first crowded school-bus bowled merrily through the R. F. D. section. This state-wide system covers local radii of 25 miles and transports daily 75,000 young Tarheelers to and from their community schools.

After a long climb up the valley we reached Linville, one of the oldest and loftiest resorts in the Land of the Sky. Its neighbor and scenic center, Grandfather Mountain, forms the rugged apex of the Blue Ridge. It is but slightly lower than the State's topmost peak, Mount Mitchell, which, at 6,711 feet, overlooks everything east of the Mississippi. Seen from near Linville, western North Carolina unfolds on a vast scale, dipping away in mountains beyond mountains, fainter and yet more impalpable,

toward the distant wisps whose hue gives a name to the entire Blue Ridge (see page 448).

That Linville is a hardwood and acid-wood center is charmingly revealed by its bark-sheathed inn and cottages. The products of its tree nurseries go far afield to beautify landscape gardens and its forests' wealth of galax decorates many a northern ballroom in mid-winter.

Thirty miles farther along the sky-scraping Yonnalasee Road lies the town of Boone, once the home of the famous pioneer and Indian fighter, Daniel Boone, who blazed the transmontane trail into Kentucky in 1775 and incidentally inspired small boys' escapades in the dime-novel days.

AS RUGGED AS HIS OWN CAROLINA HILLS

His forbears, like those of Lincoln, Andrew Jackson, Davy Crockett, Sam Houston, and Daniel Boone, colonized the southern Appalachians. In creating American place names uncontaminated by foreign influences, the Carolina mountaineer is credited with such achievements as Defeat, Desolation, Shoo Bird Mountain, Rip Shin Thicket, Shake-a-rag, and Huggins Hell. There is no idle poetry in these; they resound with grim realities, memorable incidents, and the struggle with Nature.

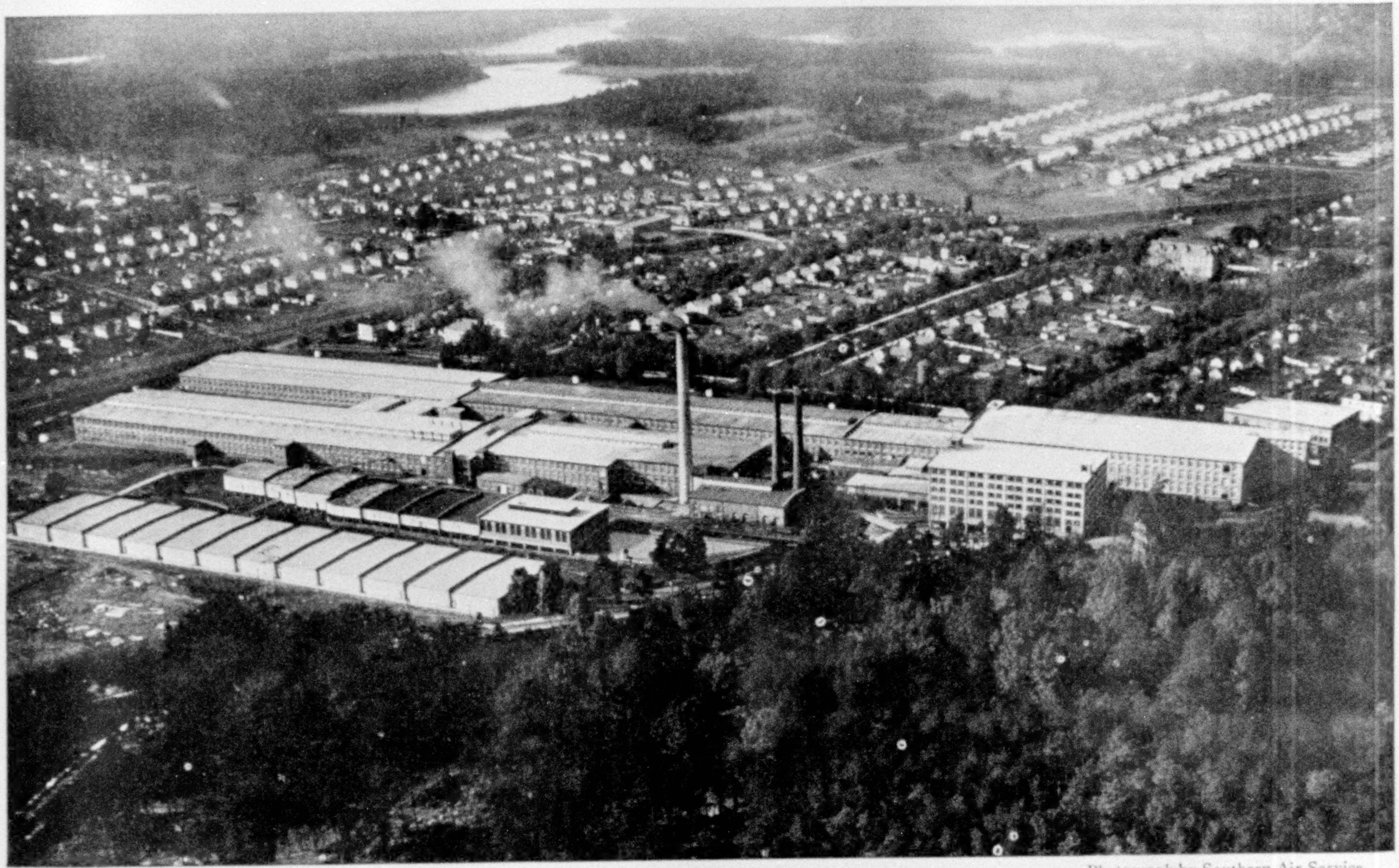
TWINS—OLD SALEM, YOUNG WINSTON

A final link of road took us through Winston-Salem, Chapel Hill, and Durham, completing the circle of our 2,000-mile motor-coaching trip around the State.

Though Winston-Salem has been designated as "the twin city" since its component towns were merged in 1913, certainly no twins ever showed greater dissimilarity than old Salem and youthful Winston. Here one has the stately 18th century and the industrial 20th century side by side, with a mere street or so acting as the hyphen.

Salem signifies that "peace" which was sought by the persecuted Moravians, who first appeared in southwest Europe as the Unity of Brethren, half a century after John Huss, that "reformer before the Reformation," was burned at Constance. One may still see among the archives at Herrnhut, Germany, the plans for the proposed town, which was realized in the Carolinian wilderness in 1753 when the Moravian Fathers hewed out the beginnings of a religious and educational center.

And that "peace" has never forsaken



Photograph by Southern Air Service

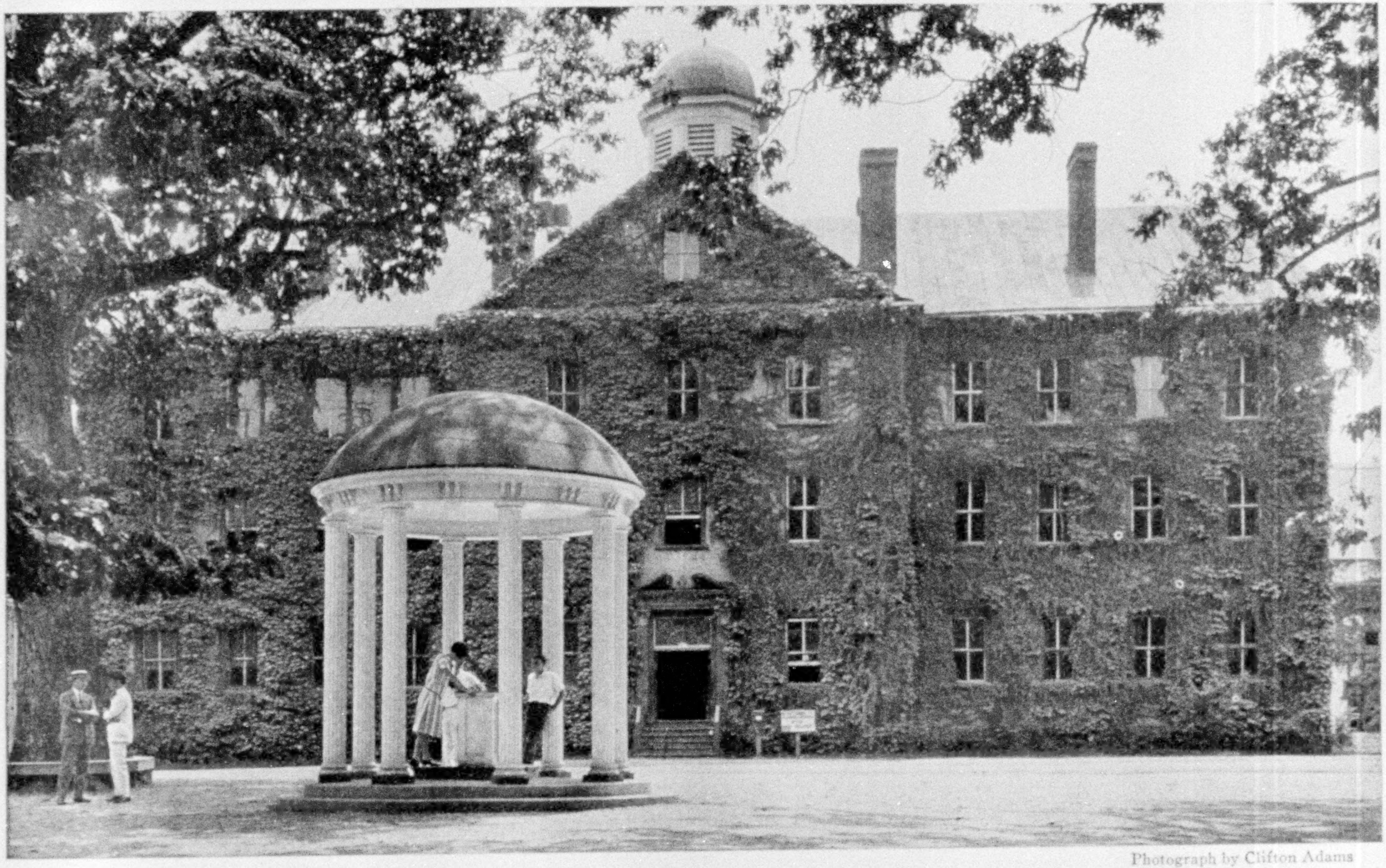
"THE LARGEST COTTON DENIMS MILL IN THE WORLD": GREENSBORO

Almost one-half of all the cotton mills in the Southern States are located in North Carolina, and it takes nearly 300,000 tons of cotton to keep them busy.

Photograph by Charles F. Doherty

MOUNTAIN ISLAND DAM, AN IMPORTANT UNIT IN A GROWING HYDROELECTRIC SYSTEM

The development of North Carolina as an industrial State has coincided with her development of hydroelectric power, which received its first impetus in 1898. The State's potential horsepower is 2,000,000, with 500,000 utilized.



Photograph by Clifton Adams

UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL: THE OLD WELL AND "OLD SOUTH" BUILDING, ERECTED IN 1795

A decade ago this university decided that a lecture room's four walls were too narrow while there existed four boundaries to the State. Accordingly, her students began investigating the shortcomings of their respective counties and reporting them in the news letter of the Rural-Social Economics Department. Weekly this bulletin went free to 16,000 doctors, lawyers, ministers, and educators. Since those days a State board of charities, a mother's-aid law, juvenile courts, and a child-labor law have all come into being in North Carolina.

old Salem. A colonial dignity, a sweet primness, breathes from its columned porches, its tree-shaded promenades, its ivied walls. Momentarily you expect some lavender-fragrant ghost in poke-bonnet, cross-gartered stockings, and ringlets to trip around the corner with a curtsey in passing.

Cross a few streets and one is amid Winston's humming beehives of industrialism, where 15,000 wage-earners are turning out their daily trainloads of manufactured tobacco, furniture, and textiles on a scale that leads Uncle Sam to rate Winston-Salem as the South's second industrial city.

A circle inclosing Winston-Salem with the denims center of Greensboro and the furniture center of High Point delimits an industrial patch 30 miles across, representing an annual products value of more than $300,000,000.

NO CARMENS IN WINSTON-SALEM'S CIGARETTE FACTORIES

Carmen, with a hand on her hip and a rose between her lips, is a world away from Winston-Salem's methods of cigarette manufacture. One machine shreds and feeds out the "makings." Another rolls them into a never-ending length of cigarette, which, as it oozes forth, is slipped into multiples as rapidly as a machine-gun sprays bullets.

Other machines make containers, affix revenue stamps, imprint and record serialized numbers—in fact, do everything for the smoker except to hand him a match. It is the machine that plays the title rôle of Carmen, while the girl inspectors are merely understudies.

Winston-Salem's stamp-sticking machines consume annually the most expensive meal in the world—a matter of $100,000,000 worth of Uncle Sam's familiar blue imprints. That is the sum of her Federal taxes, which represent one-half of those paid by North Carolina.

LOOTING OF DURHAM'S TOBACCO STORES STARTED HER FORTUNE

From the tobacco standpoint, North Carolina's civic twins are really Winston and Durham. At Durham the first perfected cigarette-rolling machine was used, and her fame for the "makings" dates back to the Civil War.

The local legend runs that during the peace-prefacing armistice the smoke-hungry Yanks and Rebs encamped around Durham descended upon its tobacco stores and looted them.

Later on the ruined owners had a joyous surprise, for when the demobilized soldiers began writing back from all over the United States for "some of that bright-leaf tobacco," Durham awoke to the fact that she had bought a nation-wide advertisement.

Durham finely symbolizes education springing out of industrialism, for it is the seat of Duke University, which is destined by recent bequests to become one of the country's greatest centers of learning.

Social welfare springing out of education is as finely symbolized by the nearby State university at Chapel Hill (see illustration on opposite page).

My last impression of North Carolina was an industrial nocturne, glimpsed from our sleeper as we shot by some humming mill town—a blaze of tiered lights, a roar of sleepless machines, the picture framed in night as black as once it was among the pine forests of the State's origin.

With those shorn forests, there has passed away forever her Golden Age, and instead she stands upon the threshold of industrial power.

A GLIMPSE THROUGH THE GREEN CATHEDRAL ARCH OF THE FAMOUS MIDDLETON OAK: ASHLEY RIVER, SOUTH CAROLINA

"As one advances through inclosed paths and over open lawns, vistas of the great tree recur at intervals, until it stands forth, fully revealed, in a wide rose garden at the river's edge" (see text, page 549).

THE ASHLEY RIVER AND ITS GARDENS

By E. T. H. Shaffer

With Illustrations from Natural-color Photographs by Jacob Gayer, Staff Photographer

AMONG the streams of America the Ashley, a short tidal river of South Carolina, is unique, both for its wistful beauty—bluffs crowned with semitropical foliage overlooking wide marshlands—and for its haunting, tragic story.

To-day its upper reaches are silent, the wide marshes the lonely haunt of water-fowl, the bluffs crowned with dark lines of forest trees; but once these shores were vibrant with the life of 18th century England that reached over the sea and flourished here throughout many generations. It centered about this river region, whose natural beauty became changed and softened by the arts of a long-established culture.

Then the tide ebbed, leaving only a quaint old seaport with walled gardens and narrow, cobbled streets, forgotten parish churches entwined in the creeping forest, here and there a manor house, or again only a silent avenue of oaks to remind a new world of its yesterdays.

Charleston, far-famed for a lingering delight of other years, in her day of glory projected her life along the banks of the Ashley River in an unbroken line of great countryseats.

As early as 1675 grants of land on both sides of the river were made to Englishmen of wealth and station, and before the close of the 18th century 35 mansions looked down from the river banks; avenues and gardens were planted beside them, while the marshes along the upper reaches were transformed into emerald squares of rice.

At private wharves the crops were loaded into ships that sailed up and down the river, bringing in exchange the luxuries and conveniences of the Motherland.

After the English custom, each of the river estates bore some distinctive name that clung from generation to generation; even now deserted groves and avenues retain such proud titles as Windsor Hill, Courtlands, White Hall, and Runnymede.

An English church, St. Andrews, where the landed gentry worshiped, was built in 1706 (the date is carved above its southern doorway) and still looks down on the river from a dark grove of live oaks.

CORNWALLIS HAD HIS HEADQUARTERS AT DRAYTON HALL

During the Revolution English troops held this Ashley River country, Lord Cornwallis establishing his headquarters at Drayton Hall. Little damage was done by his soldiers, and with peace began long years of prosperity for the region, lasting, in fact, until 1861, when a more cruel war came upon the land.

When peace returned again only three of the great houses remained, among them being Drayton Hall, which is still occupied by a descendant of the builder.

The Duke de la Rochefoucauld Liancourt in the spring of 1796 made an excursion up the Ashley River, as he says, "to enlarge my acquaintance with the interior of the country and to view the countryseats along the river which enjoy the greatest celebrity.

"I first stopped at Drayton Hall, where we dined. This is an ancient building, convenient and good. The gardens along this river are better laid out, better stocked with good trees, than any I have hitherto seen in America.

"In order to have here a fine garden, one but has to let the proper trees remain, here and there or in clumps, plant bushes in front of them, and arrange other trees according to their height.

"Dr. Drayton's father, who was a physician, began to lay out his garden on this principle; and his son, who is passionately fond of country life, has pursued the same plan."

The natural appearance of this region, especially in the spring, is still that of a God-made garden, a paradise where man walks reverently. These forests are set with live oaks, huge arched limbs sweeping the earth with long festoons of moss,

MARCH AND APRIL BRING THE SPRING FESTIVAL OF THE AZALEAS

Middleton Place Gardens, on the Ashley River, about three miles from Magnolia Gardens and seventeen miles north of Charleston, South Carolina.

"THE LONG MOSS WAVES IN EVERY BREEZE"

Magnolia and other Ashley River estates have remained through the centuries in the hands of those who preserved rather than sought to replace Nature (see page 528).

IN THE OLD SPRING HOUSE OF MIDDLETON PLACE

Long before the days of artificial ice this was a noted refrigerating plant (see text, page 549).

and in every direction the straight trunks of pines range themselves into natural aisles, down which one glimpses carpets of wild azalea, purple Judas trees, and white dogwood, while ghostly Old-Man's-Beard (*Chionanthus virginica*) peers from the swamp shadows.

Overhead, everywhere, against gray moss and dark pine, swing bridal wreaths of white Cherokee rose. The patient yellow jessamine clambers unnoticed into tall trees to crown them with brief diadems of gold.

Into such a land came Englishmen in the dawn of that 18th century when landscape gardening in England had attained greatest vogue and perfection. Small wonder that they soon occupied themselves with training the natural beauty of this new world along the more formal lines of the old.

GARDENS HAVE REMAINED FOR CENTURIES IN THE SAME FAMILIES

And it is because the Ashley River estates have remained through centuries in the hands of men who have been faithful to the vision of their fathers, and have preserved and not sought to replace Nature, that the ancient charm has not fled.

Here one does not meet Nature entirely tamed or put through parlor tricks of the topiary art, as at Hampton Court or the Boboli.

At Magnolia there is always the background of virgin forest, the canopy of native trees, the winding lake of black water, not unlike other black pools in the near-by forest, but here a pool magically glorified.

Middleton Place, while achieved in more formal manner, is stepped back gradually into an untouched forest; the flower beds project in scattered groups among the virgin pines; native flowering trees are employed with discretion in the more formal portions; then more frequently, as they near the forest's edge, so that no one may say just where man's garden ends and God's begins.

One seeking this romantic region may motor through Summerville, a village that has transformed itself into a spring flower garden, crossing the upper Ashley on old Bacon's Bridge, near the picturesque ruins of Dorchester Town. This town was built by a band of Puritans

THE KEEPER OF THE OUTER GATE: MIDDLETON GARDENS

"One is swept back into the past by the courtly bow of the ancient Negro gatekeeper who has in like manner welcomed generations of guests that once came dashing in coach and four to visit the 'great house'" (see text, page 531).

who came here from Dorchester, Massachusetts, in 1696.

BURNED HIS HOME TO SAVE IT FROM ENEMY

I, however, came by way of Charleston, leaving the main road five miles south of the city. Thence I followed a well-kept road through the pines, from which at intervals ancient avenues of live oaks lead down to the river.

The first and most magnificent of these avenues was once the approach to Ashley Hall; but the mansion of Governor Bull is gone and there remain here only the noble trees and a memory. The last of the long line of proprietors was William Izard Bull, who, it is said, during the Civil War locked the doors upon his treasures and himself applied the torch to the home of his fathers to save it from the hands of the enemy.

Scattered along the road are the primitive houses and villages of Negroes,

A PLACE OF BEAUTY FOR TWO AND A HALF CENTURIES: ENTRANCE TO MAGNOLIA-ON-THE-ASHLEY, SOUTH CAROLINA

descendants of slaves who once toiled in the humid ricefields along the Ashley River—humble producers of that wealth that was the basis of a great civilization.

The masters, lords of the land, have vanished before great cataclysms that shook human society, but the lowly blacks, rooted to the soil, have lived on in undisturbed tranquillity, as untroubled as is the grass when tempests rend mighty trees. As a rule, each family owns its rude hut and a few surrounding acres, fragments into which vast tracts were broken when the old order ended.

At other points, for miles the earth is raised into huge furrows, sometimes 20 feet high, as if Titans had once plowed the land and then abandoned it to the quick forest. These are the old phosphate diggings, where, just after the Civil War, rich beds of Eocene fossils were found.

Here the recently emancipated Negroes found employment, and for a season the region became a scene of feverish activity that brought renewed wealth to many of the war-impoverished landowners; but after a few years the industry languished, the works were abandoned, and the forest returned to mantle the tossed earth.

THE MAGNOLIA ESTATE IS 250 YEARS OLD

The next evidence of former civilization is the little parish church of St. Andrews, intact among the trees, waiting for its worshipers

> ". . . and not a soul to tell
> Why thou art desolate can e'er return."

A few miles beyond the church I was attracted by the impressive gates of Drayton Hall, but discouraged by the legend above them, "Closed to visitors." The famous house can only be viewed by the public from the river, as it is set some distance back from the road. In its walls are the letters "KW," deeply carved, the work of some Hessian soldier, who fancied these to be the initials of his commander, Lord Cornwallis, who occupied, but spared, the building.

Next in order comes Magnolia, another ancestral estate of the Drayton family. It is opened during the spring to the public and lures visitors in increasing throngs each season. The original grant of this tract was made in 1676, and about 20 years later it was devised by will to Thomas Drayton, in whose line it still remains. An attractive cottage now stands upon the foundations of the original dwelling which was mentioned by John Davis in his "Travels in America," published in 1798, as "a venerable mansion."

The famous collections of *Azalea indica* and *Camellia japonica*, which have long made this estate the spring fairyland of the South, were planted by the Rev. John Grimké Drayton, rector of the Parish of St. Andrews, who devoted many years of his life to the beautification of the gardens, importing rare and lovely plants from distant lands.

Artists and poets have labored in vain to convey their impressions of the loveliness of dazzling masses of exotic bloom in somber setting of magnolia and cypress and gray moss, the whole mirrored in the surface of a still, black pool (see Color Plates XII and XIII).

After leaving Magnolia, one passes two long avenues that lead to Runnymede, for many years the home of the Pringle family. One of the avenues is of live oaks, the other of solid green walls of interlocked magnolias, sidereal with white, fragrant blossoms.

Another avenue is called the Alphabet Walk because the name of each tree is supposed to begin with a different letter of the alphabet. There are traditions of a secret word that they spelled, but no one has ever solved the arboreal acrostic.

The road dips to cross a quiet stream, then at the brow of a small hill stand the entrance gates and curved walls of cypress and weathered masonry that guard Middleton Place, the ancient seat of the Middleton family—an estate illustrious through two centuries of American history, and to-day, with its great manor house in ruins, far-famed as one of the oldest and noblest landscape gardens in the New World.

In entering the gates one is swept back into the past by the courtly bow of the ancient Negro gatekeeper, who has in like manner welcomed generations of guests that once came dashing in coach and four to visit at the "great house."

ONE HUNDRED SLAVES TOILED TEN YEARS ON MIDDLETON GARDEN

I attempted to draw the old servitor into conversation, as an interesting bit of

local color, but he is almost stone deaf. His most vivid recollection of the outside world seemed to be of a visit to Charleston, where, as a small slave, he saw the plumed black horses bearing the body of the mighty Calhoun to St. Philip's Church. As John C. Calhoun died in 1850, the old man has held the gates for many to pass.

The first grant of this tract was made in 1675 to Jacob Wayte. It soon passed into the hands of the Middletons, and in 1740 Henry Middleton, afterward second president of the Continental Congress, sent to England for a skilled landscape gardener, under whose direction 100 slaves toiled for 10 years to achieve the miracle of terraces, ornamental waters, walks, groves, and fields of flowers that have endured through the vicissitudes of years, the cruelty of wars, the rise and fall of nations. Now, beautified by Time and mellowed with age, they are the precious heritage of a united people.

FAMOUS FRENCH BOTANIST INTRODUCED MANY TREES

Here came the French botanist, André Michaux, in 1785, bringing many new plants and trees from Europe. He is supposed to have introduced here the Japanese varnish tree, the Chinese candleberry tree, the Japanese ginkgo tree, the Asiatic acacia, the Chinese azalea, and many other varieties.

Among the countless *Camellia japonica*, of all colors and descriptions, now in these gardens, there are three, grown into giant trees, said to be the original importation of this plant into America. As the name indicates, it is a native of the Far East.

The estate was further embellished by Arthur Middleton, signer of the Declaration of Independence, who rests in a large gray mausoleum in the deep shadows of the garden that he loved.

His son, Henry Middleton, 2d, for many years minister to Russia, returned to end his days peacefully at Middleton Place, bringing to the house rare works of art, several pictures being gifts from the Tsar.

The manorhouse, built in 1740, that once crowned the highest terrace, was a spacious three-story structure, with detached wings, or flankers, on either side, all with massive walls of English brick and built in the Tudor style. It was the scene of many patriotic gatherings during those strenuous days that culminated in the Revolution; for, like the Motherland, this far-flung bit of England was governed largely from its country-seats; and so, much history was written in the Ashley River homes.

Both Henry Middleton and his wife, Lady Mary, fair daughter of the Earl of Cromartie, as well as the son Arthur, seem to have early espoused the cause of liberty, and to have made Middleton House a rendezvous for that band of gallant gentlemen who live again in the pages of Sabatini's "Carolinian."

When British troops held the river they spared mansions that, maybe, recalled "the stately homes of England," but at Middleton Place they cut the head from West's portrait of Arthur Middleton, whom they termed "the damned rebel," and also amused themselves with breaking the heads from the marble statues that adorned the grounds, and by pitching lovely furniture from the high windows.

John Izard Middleton, called the first American archeologist, spent many years in Europe studying, painting, and collecting. About 1825 he returned to live at Middleton Place, bringing his library and a large collection of pictures, among the latter being a painting by Gerard of Madame Récamier, her own gift to the gallant American; also a portrait of Mrs. Middleton by Romney.

MANSIONS LEFT IN KEEPING OF FAITHFUL SLAVES

In 1846 the estate passed into the hands of Williams Middleton, who greatly heightened the charm of the gardens by adding the magnificent beds and hedges of *Azalea indica*. And so Middleton Place entered upon its second century.

But soon came more political gatherings, the mutter of a distant storm; soon the thunder of guns rolled up the river from Fort Sumter and war had come again. The men marched away and the quiet mansions were left in the keeping of faithful slaves.

In February, 1865, raiding bands swept

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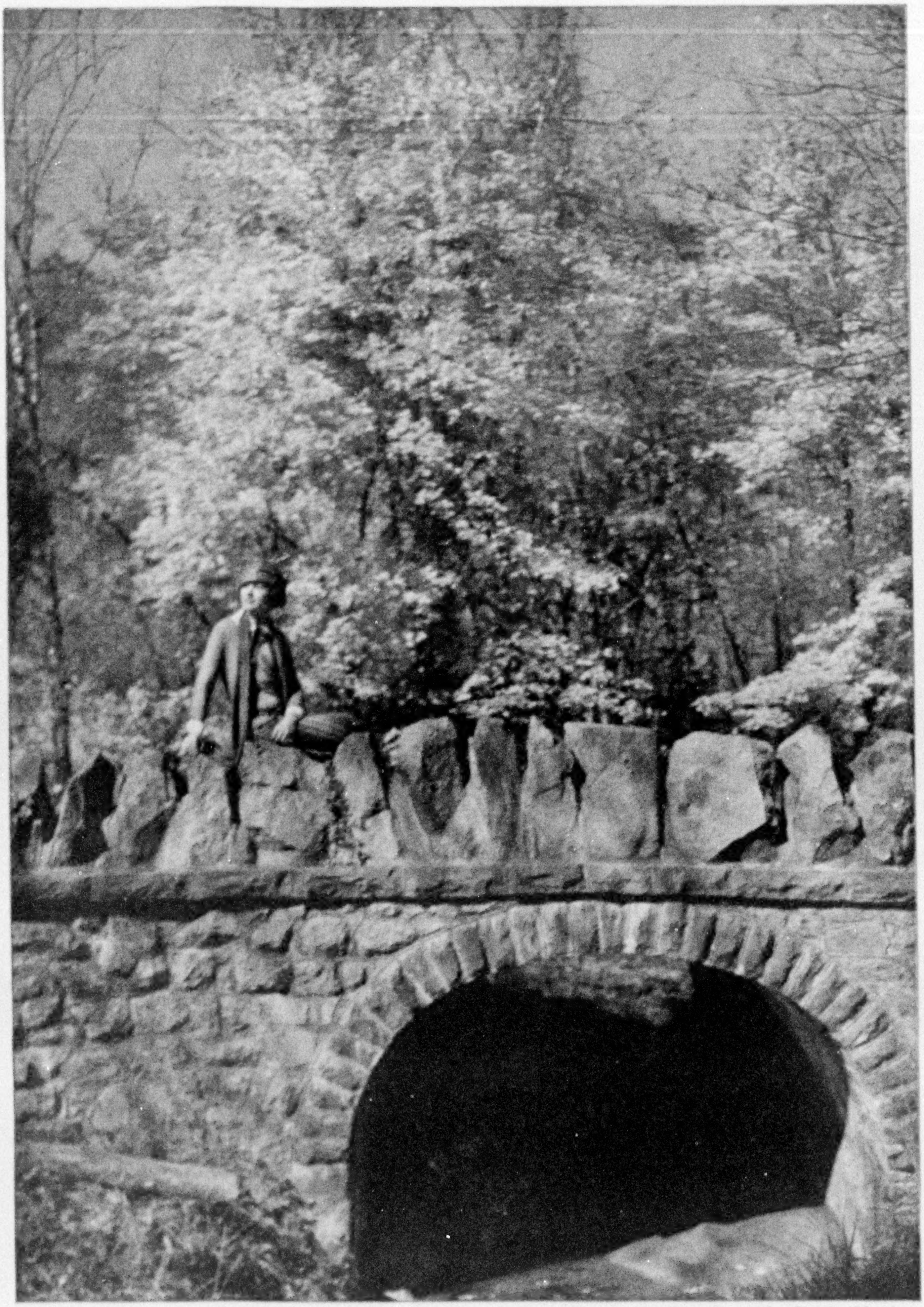
CORN HARVEST TIME IN VIRGINIA



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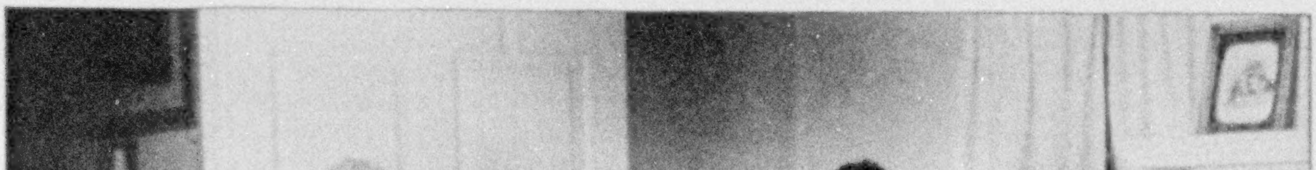
AUTUMN FOLIAGE IN ROCK CREEK PARK

Its bowlder bridges, its miles of bridle paths, its undulating hills and meandering drives following the course of the stream from which the park derives its name, make this vast beauty spot of the Nation's Capital one of the outstanding natural parks of the world.



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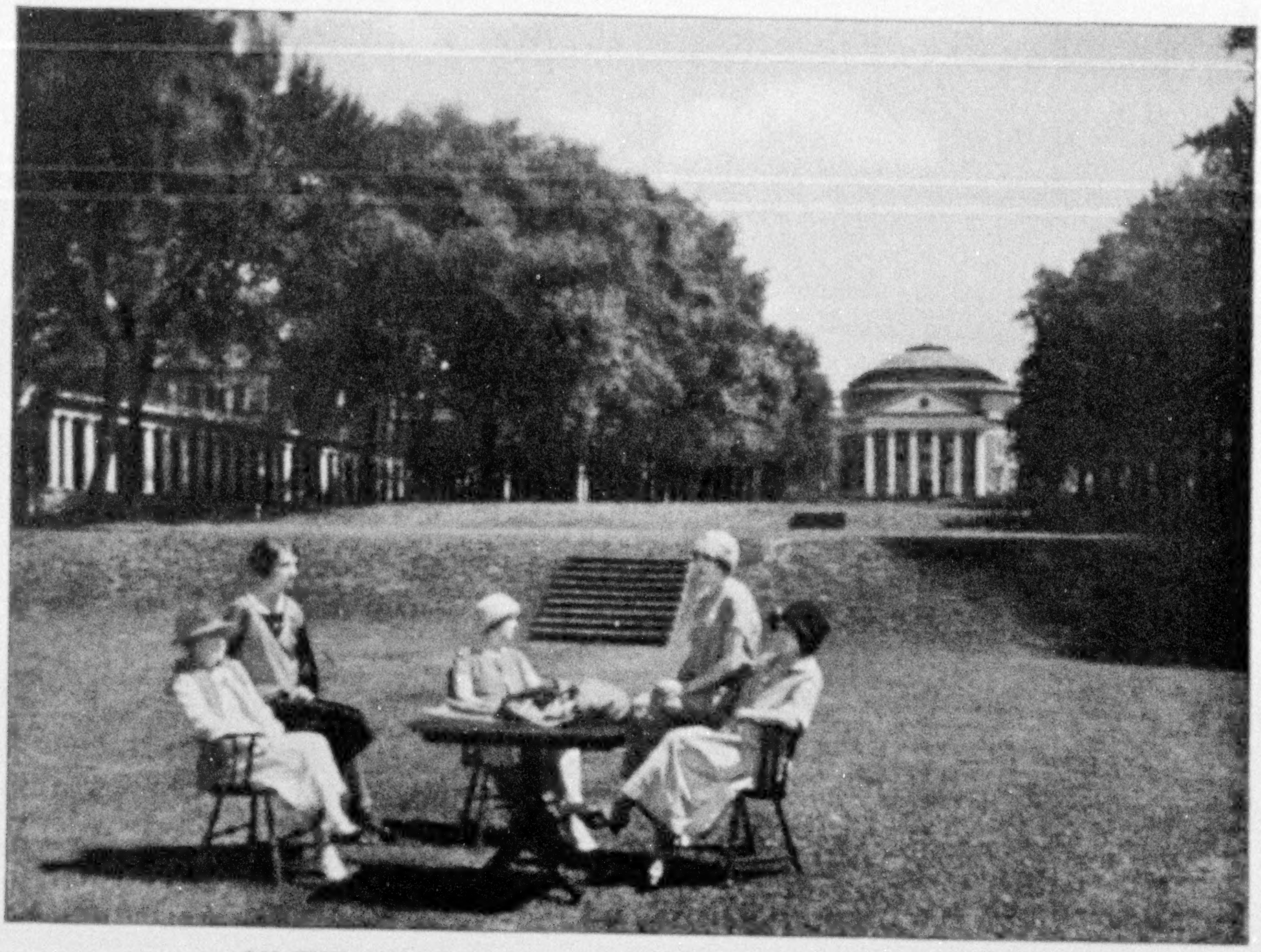
IN THE HOUSE AND GARDEN OF WASHINGTON'S MOTHER

In Fredericksburg, Virginia, is the home occupied by Mary Washington while her illustrious son was winning the War of American Independence. When Kenmore was dedicated recently (see Color Plate VI), the Association for the Preservation of Virginia Antiquities held costume ceremonies here.



ON THE QUADRANGLE OF THE UNIVERSITY OF VIRGINIA

The porticoed library of this venerable institution of learning at Charlottesville, Virginia, is flanked by the colonnaded residences of its faculty.

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MONTICELLO, THE HOME OF THOMAS JEFFERSON

It is interesting to note the striking similarity in the architecture of the residence of the founder of Virginia's university, and of its library (see above).

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APPLE-PICKING TIME: WINCHESTER, VIRGINIA

It is not mere trite phraseology to speak of these matchless Winesaps as "fit for a king;" many of them are shipped to Europe for royal tables.

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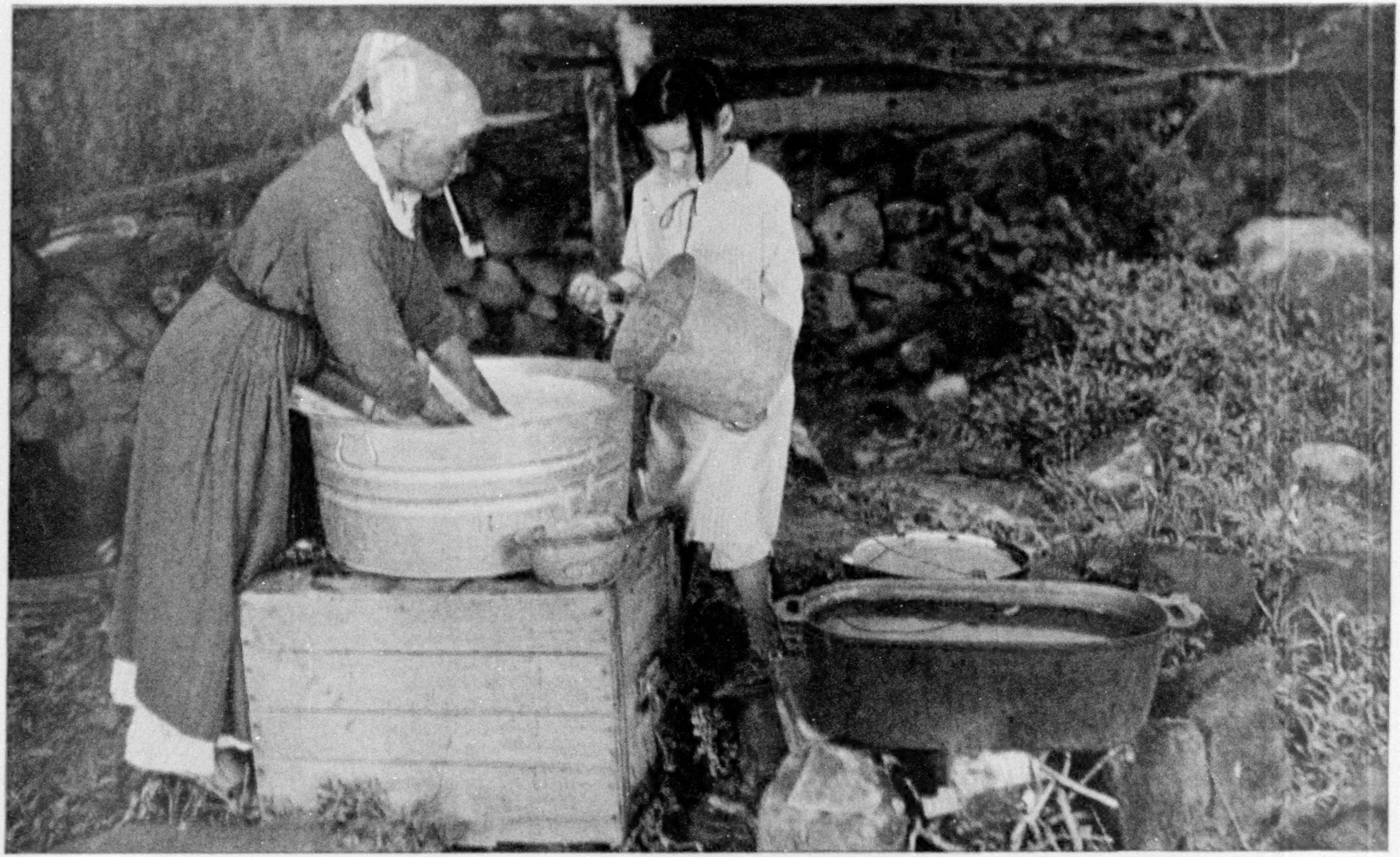
CELEBRATING THE DEDICATION OF KENMORE: FREDERICKSBURG, VIRGINIA

Many histories of the Revolution overlook the share which Colonel Fielding Lewis had in the achievement of American Independence. It was he who, perhaps inspired by his wife, General Washington's favorite sister, Betty, provided the ordnance which armed the colonial forces. His estate, near Fredericksburg, has been rescued from decay, and restored recently by the Kenmore Association. The restoration was made the occasion for a pageant reënacting the scene when Washington and his generals returned triumphant to Fredericksburg after Yorktown.



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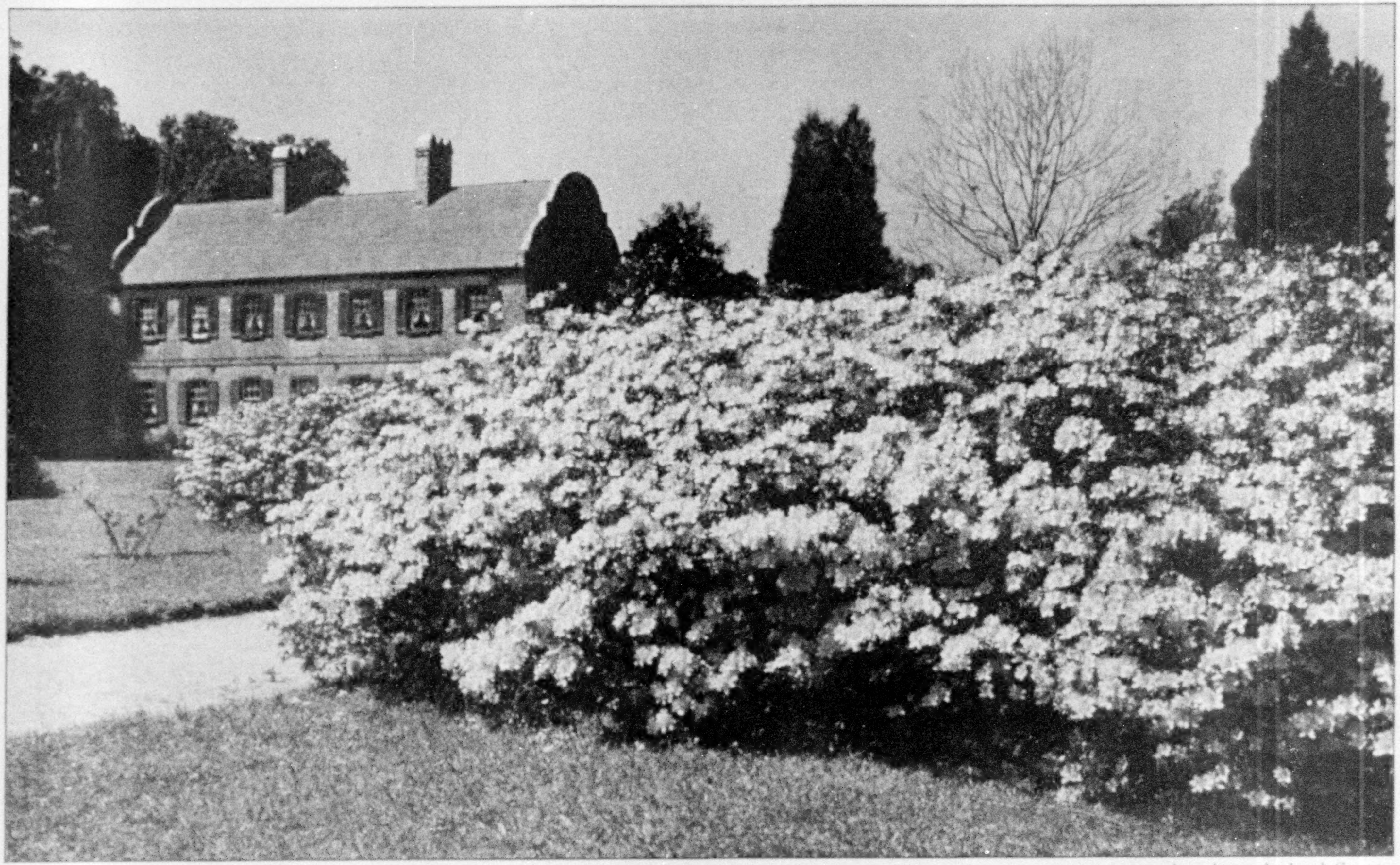
A VIRGINIA MAMMY, ANCIENT OF DAYS

Aunt Lucy has nursed three generations of Virginians. She now spends her winters in New York, but when spring comes the lowly cabin on the mountainside calls her back to Sperryville.



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A GLIMPSE OF A RESTORED WING OF MIDDLETON MANSION: SOUTH CAROLINA

Only the steps of the central hall and the walls of the east wing of the original structure, built in 1740, survived a conflagration during the Civil War. Upon these remains a direct descendant of the first Henry Middleton, who conceived these gardens, has erected this ancient-seeming home in a bower of blossoms.

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WHERE MANY EXOTIC FLOWERING SHRUBS FIRST FOUND A HOME IN THE NEW WORLD

Much of the beauty of the Middleton Gardens is due to André Michaux, the French botanist who is supposed to have introduced here the Japanese varnish tree, the Chinese candleberry tree, the Japanese ginkgo, the Asiatic acacia, and the Chinese azalea (see page 532).

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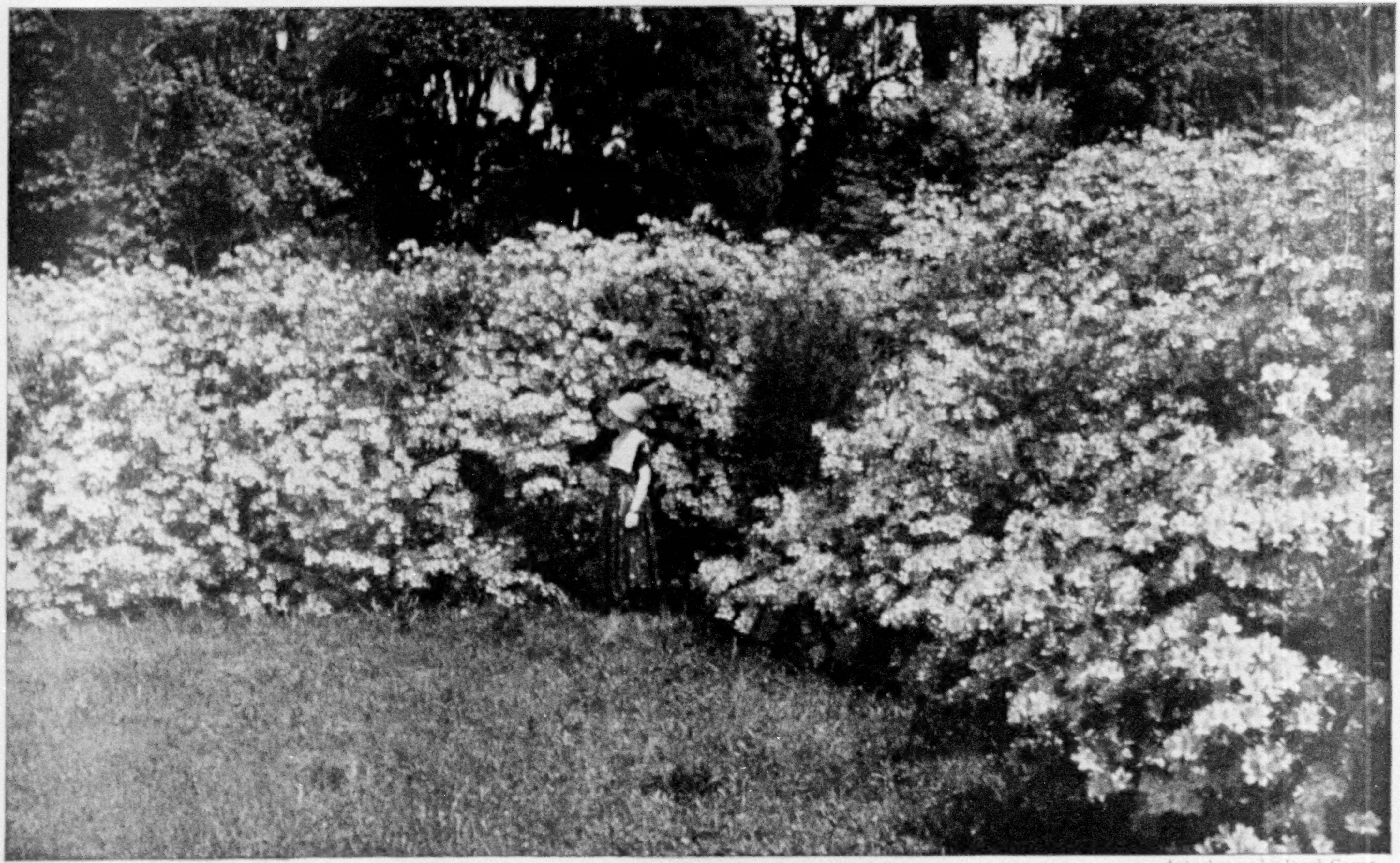
FLOWER BEDS PROJECTED IN SCATTERED GROUPS AMONG THE PINES

Flowering plants are employed with discretion in the formal portions of the Middleton Gardens, which extend gradually into an untouched forest (see text page 528).



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A BANK OF AZALEAS: MIDDLETON PLACE

"In the early morning, through the oaks, squirrels frisk and hurry on ceaseless errands, while mocking birds spray jewels from heavy, dew-drenched branches of azalea blossoms, as they dart in ecstasy, transposing the glory of color into song" (see text page 550).

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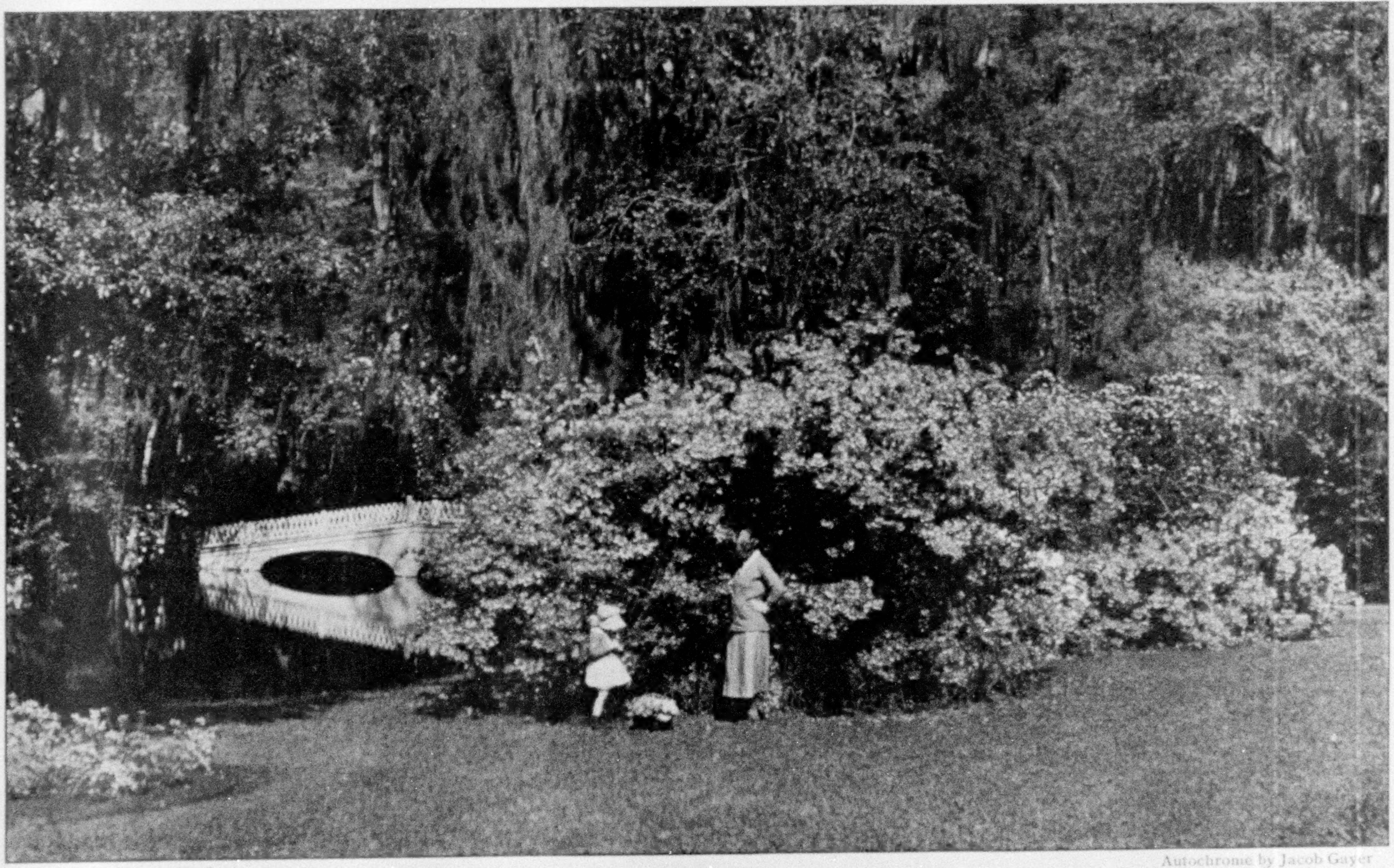
A CANOPY OF NATIVE TREES WITH A BACKGROUND OF VIRGIN FOREST: MAGNOLIA GARDENS, SOUTH CAROLINA



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A WINDING BLACK POOL PORTICOED WITH GRAY COLUMNS OF CYPRESS

In the Magnolia Gardens there are avenues and borders of large and ancient live oaks which lead to this embowered water mirror.

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AZALEA BLOSSOMTIME IN SOUTH CAROLINA

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THE CHERRY-BLOSSOM SEASON IN WASHINGTON, D. C.

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AT THE AMARYLLIS SHOW: DEPARTMENT OF AGRICULTURE GREENHOUSES, WASHINGTON, D. C.

down, the backwash of distant armies, and the river was lurid with the flames of the homes along the shore. Of Middleton House only the steps of the central hall and the walls of the east wing remained, and when the fires died most of the treasures were but a memory.

Happily, the gardens escaped unharmed, and to-day, under the loving care of a direct descendant of that first Henry Middleton who visioned here a river paradise, they are maintained and graciously opened to the public.

The owner resides for a portion of the year in the restored wing of the ancient building (see Color Plate VIII), where he has gathered about him priceless treasures of the past. Many of these were once hidden in remote places in the garden by loyal retainers of the family, and so escaped the flames.

A GREAT OAK AT MIDDLETON

At Middleton Place there is one outstanding live oak that is to me the genius of the estate. When approaching the garden, its lofty crown is seen, lending a sense of majesty from afar.

As one advances through inclosed paths and over open lawns, vistas of the great tree recur at intervals until it stands forth, fully revealed, in a wide rose garden at the river's edge. Then one draws near silently and stands within the green cathedral of its arches. On one hand stretches the river and the marsh; on the other, between draperies of waving moss and the vast buttresses of gnarled, low branches, the flowers gleam like windows of many-colored glass (see page 524).

Experts have variously estimated the age of this oak as being anywhere from five to seven centuries, but even the lesser makes it venerable before Columbus. And yet, gloriously sturdy and healthy it stands, braving the storms and renewing its youth each recurrent spring with a fresh mantle of tender green. The branches form almost a perfect circle, giving a shade-span at noon of 180 feet. Its trunk measures 35 feet in circumference.

The great tree suggests some abiding presence that broods above the shifting panorama of human life flowing with the years along the Ashley River.

There are many things at Middleton Place to remind one that here was once more than a garden: that this was once a little world, where centered the busy life of a great plantation. Long before the days of artificial ice, the old dairy was fashioned. Its walls are of English brick, the floor of the same material, worn smooth and indented into a series of shallow pools, through which flow the waters of an icy spring (see page 528). It must have been a noted refrigerating plant in the old days, especially in this "low country," where springs are infrequent. One cannot fail to notice that all about its walls is a luxuriant growth of mint. This, too, is now out of date.

AN ARTIFICIAL WATERFALL RAN THE OLD RICE MILL

The old rice mill at the river landing was unique in the entire rice country, in that it was operated by an artificial waterfall from one of the ornamental lakes. When one considers the slight contours of the coastal region, one is amazed at the labor and ingenuity required to attain such a result.

There are still several quaint domestic survivals of the slave régime. Besides the gatekeeper, I met wrinkled Maum Annette, still spry and with keen recollections of the halcyon days of "Ole Maussuh." She told me of seeing ponderous "water-cow" sleeping through the hot summer days almost submerged in one of the lakes.

The tale astonished me until I learned of the water buffaloes brought from India by one of the early Middletons in the hope that they might prove of as much value in the soft rice fields of the Ashley River as in the delta of the Indus.

Evidently the experiment did not prove a success, as the animals seem to have become merely a curiosity of the estate. Near the close of the Civil War they were carried North, where their descendants are said still to inhabit certain zoological gardens.

A SECRET UNDERGROUND PASSAGE THAT SAVED REVOLUTIONARY HEROES

Another of old Annette's tales is of a mysterious underground passage that led "from de great house tuh de big pon'."

Traces of this have recently come to light, and it was through this that one of General Marion's officers, surprised by British troops while dining at Middleton Place, is said to have escaped and to have spent several cool hours, with only his military nose above water, in uncomfortable imitation of the water buffaloes.

In these Ashley River gardens Nature is softened with the patina of long and intimate human association. Nature and life seem almost blended into one harmony. Festoons and flames of color that are blossom of azalea and camellia and wisteria proclaim the joy of life, the glory of love; but on every hand cypress and oak, ancient and gray with pendent moss, are symbolic of age and the inevitable end, while the wide, unchanging marsh beyond the river whispers of eternity.

Even the wild creatures that find sanctuary here know that in such a glorified forest man must live in gentler mood. Tall white cranes stand boldly, motionless along the shore; blue herons flap lazy wings in slow, unhurried flight above the tide; bright summer ducks dart through the tree tops or drop with sudden splash into the lakes.

In the early morning, through the oaks, squirrels frisk and hurry on ceaseless errands, while mocking birds shatter jewels from heavy dew-drenched branches of azalea blossoms, as they dart in ecstasy, transposing the glory of color into song.

A YEAR-ROUND PROCESSION OF FLOWERS

There is a year-round procession of flowers. The camellias begin in late November and linger until the end of April; March and April form the spring festival of the azaleas, and as they pass the gardens are filled with the delicate pinks of mountain laurel. Through the summer months there is a succession of roses, while the air is filled with the heady perfume wafted down from the giant *Magnolia grandiflora*.

And blending in with these major notes are always a thousand minor flowers—heatherbell and hawthorn, lotus and iris.

The formal terraces and lakes at varied levels may recall better-known European gardens, but the live oaks hold a tone that is of the New World and of the South.

Standing on the broken steps of Middleton House and looking out over the terraces, there marches before one's eyes much of America's history. From the sea a little wind moves across the wistful marshes,

> "The long moss waves in every breeze,
> Like tattered banners old and gray;
> And sigh and sigh the old, old trees
> All night, all day."

To this spot came England's best and bravest to build her empire upon an unknown shore, and here, in the appointed time, her sons planned and struck for freedom. Far down this river sounded the opening guns of a greater conflict, and here the closing scene, when the river mansions were given to the flames.

Through the dark marsh that was once an emerald rice field the river throbs with the measured beat of the ocean's tide; to the west it is lost in a somber swamp, beyond which lie the hills, the plains, the far mountains of a new Nation.

Notice of change of address of your Geographic Magazine *should be received in the office of the National Geographic Society by the first of the month to affect the following month's issue. For instance, if you desire the address changed for your June number, the Society should be notified of your new address not later than May first.*

LONDON FROM A BUS TOP

By Herbert Corey

Author of "Adventuring Down the West Coast of Mexico," "Andorra, a Unique Republic," "Across the Equator with the American Navy," "On the Monastir Road," etc., in the National Geographic Magazine

ONE sees London best from a bus top, or so it seems to me. On board a bus, one tunes into London's life, feels oneself a part of it; enjoys the perky messenger boys with their tin-can hats cocked on three hairs, the huge policemen, the screevers and their pastel sketches on the pavements, the sandwich men, the clattering crowds, the men and women of fashion.

In a private car the least snobbish feels himself aloof and superior. On a personally conducted tour one is only the pea tossed in the dishpan of a careless conductor's rhetoric. In a taxicab even the very reckless cannot refrain from watching the meter. But from a bus top one looks down, part and parcel of all he sees, understanding and being thrilled by a thousand activities.

RIDING PAST A PAGEANT OF HISTORY

It is true that one sees the centuries without order or sequence; but that is as it should be in London, where to-day, to-morrow, and 1,800 years elbow each other companionably.

Perhaps one leans over the rail to see a lordling sprawled at the wheel of a great car, all color and silver, on that Watling Street which was one of the four thoroughfares by the aid of which the Romans held Britain; or to watch those who are to fly to Paris stepping into the car that is to carry them to the flying field at Croydon.*

Next, the bus passes a porter's lodge in which a duchess lives at the gates of the great house she can no longer afford to occupy. Or the brass triangle near the Marble Arch, which marks the site of Tyburn Tree, a common gallows away back in 1196. Or that street of pallid houses built by a French architect that Napoleon's officers might have fitting quarters when he had conquered England.

* See "Looking Down on Europe," by Lieutenant J. Parker Van Zandt, in the National Geographic Magazine for March, 1925.

Or the Horse Guards, where massive sentinels in scarlet and buckskin and silver bestride horses of black silk. One marvels at the horses more than at the men. However do they train them to stand so still? (see illustration, page 578).

One sees an episodic and disconnected London in this way, it is true; but London is casual in her greatness. The London dweller mourns the "improvements" which are doing away with so many fine old houses. The stranger sees the steel skeletons rising overhead, to be clothed with the flesh of the new London.

Yonder is Lansdowne Passage, leading from Piccadilly into Curzon Street. The street is the citadel of the highest fashion, lined with gloomy houses. A steel bar is still set across the passage, that no highwayman may gallop his horse through it to safety in the fields, as one formed the reprehensible habit of doing a hundred years ago.

Near by is the Shepherd's Market, which is in its essentials what a shopping district was in London in Dick Turpin's time, and a little public house whose customers are almost wholly the Jeames Yellowplushes of to-day. A wealth of gossip about their masters might be gathered there by one admitted to their intimacy.

Off Whitehall one may see the window through which a king walked on his way to the block. Over the rail of Hyde Park one may glimpse the little gravestones of the dogs' cemetery (see page 556); then hurriedly glance at the new Devonshire House, wherein apartments may be leased for 999 years at an incredible number of pounds by the year.

DOORMEN AND SOLDIER GUARDS HOLD KEYS TO MUCH OF LONDON'S HISTORY

To get the full value from a bus-top tour, one must have a certain leisure. Two weeks is not too much. Even then he can but skim the surface and gain a faint idea of how amazing is this largest

Photograph by Maynard Owen Williams

THE BEST WAY TO SEE THE WORLD'S GREATEST CITY—FROM THE TOP OF A LONDON BUS

city in the world. He should be historically minded. Above all, he should be a true lover of romance. He should be able to peer through the curtain of to-day into a more colorful—and unpleasant—past.

He should cultivate the doormen, the old soldier guards with their broad chests strung with ribbons, the vergers who watch the churches. Let him avoid the gabbler who patters through a memorized speech, and seek out, rather, the man who is casual to the verge of gruffness. He loves that nook of a past century into which fate has cast him, and his outward manner is but a carapace which may defend his inner tenderness from the irreverent.

Especially are Americans in his black books, because we are forever in a hurry. In Westminster Abbey a licensed guide eyed us coldly, stated his terms in the most businesslike fashion, and said:

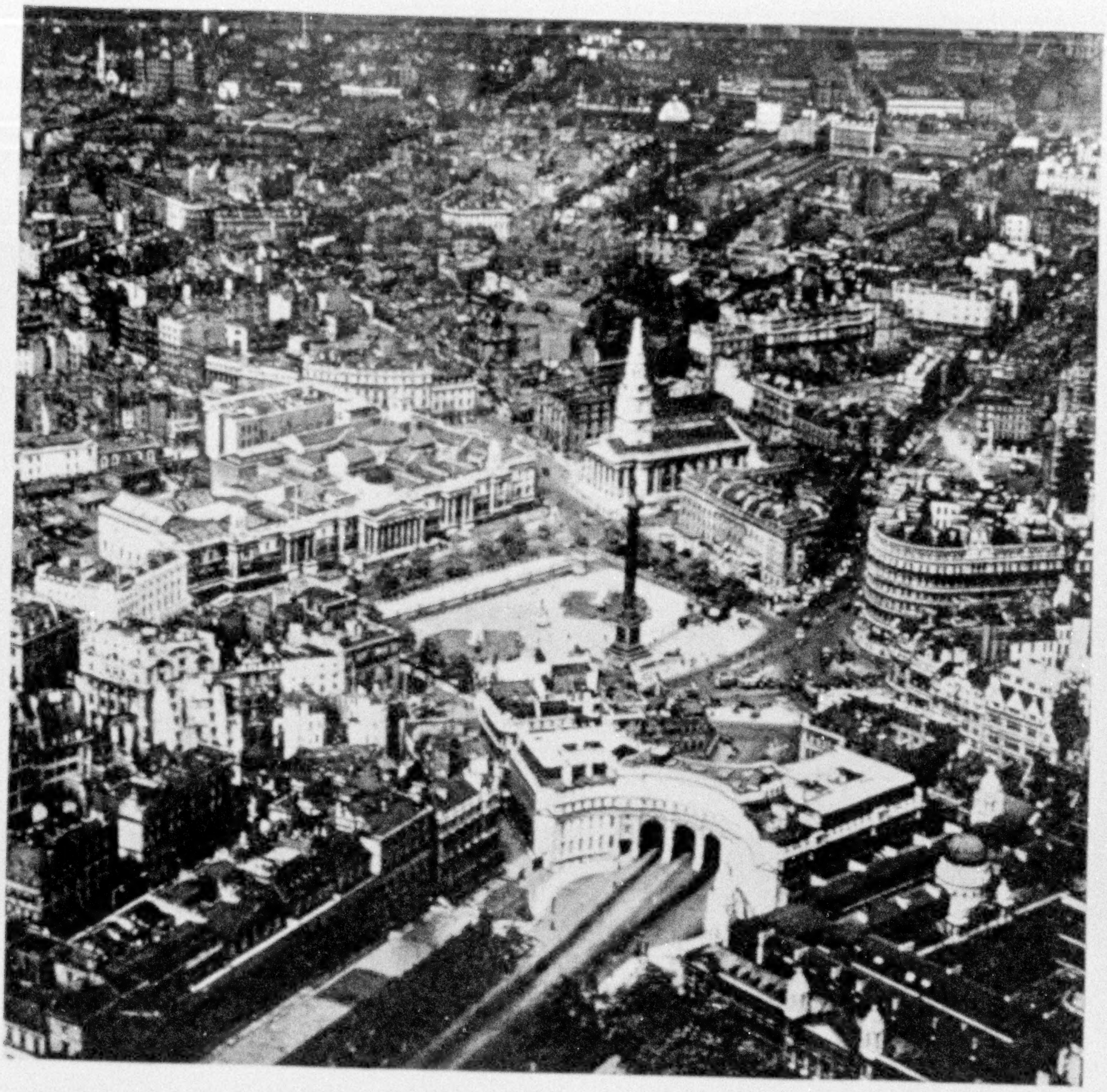
"Your countrymen often ask me how much I can show them in ten minutes."

Yet when he discovered that we were really interested he revealed himself as a cultured gentleman. He had come down in the world, it is true. England is full of the "new poor." His background was that of Eton or Harrow, Cambridge or Oxford. Better still, he was a lover and a student of the Abbey. When we exchanged cards at the close of the afternoon, we felt that we had become friends. The following day we saw him trot, giving cry, at the head of a pattering procession. His announcements had the subtle eloquence of a train-caller.

TRAFALGAR SQUARE IS THE CENTER OF INTEREST

Trafalgar Square is the natural center of London for the adventurer. It is true that Charing Cross, a long stone's throw down the Strand, is accepted as the geographical center, if there can be a geographical center of a map which is messed about as is that of London by the oxbow bend of the River Thames.

At any rate, the 699 square miles of the Greater City includes all parishes any part of which may be within 12 miles of the



THE HEART OF LONDON: TRAFALGAR SQUARE (SEE, ALSO, PAGE 572) AND THE MALL

At one side rises the granite column topped by Nelson's statue. Beyond are the National Gallery and the Church of St. Martin's-in-the-Fields (see text, page 554). In the foreground is the Admiralty Arch.

Cross, or of which the whole may be within 15 miles.

But Nelson's Column, in Trafalgar Square (see page 572) is the North Pole to the visitor's compass. If he were able to mount to Nelson's eminence, as steeplejacks sometimes do, and there revolve upon his heel, he would discover that each quarter turn would reveal a new aspect.

Down Whitehall is the ancient City of Westminster, with the Houses of Parliament and the Abbey (see page 574).

The Strand opens to Fleet Street and the offices of the great newspapers.

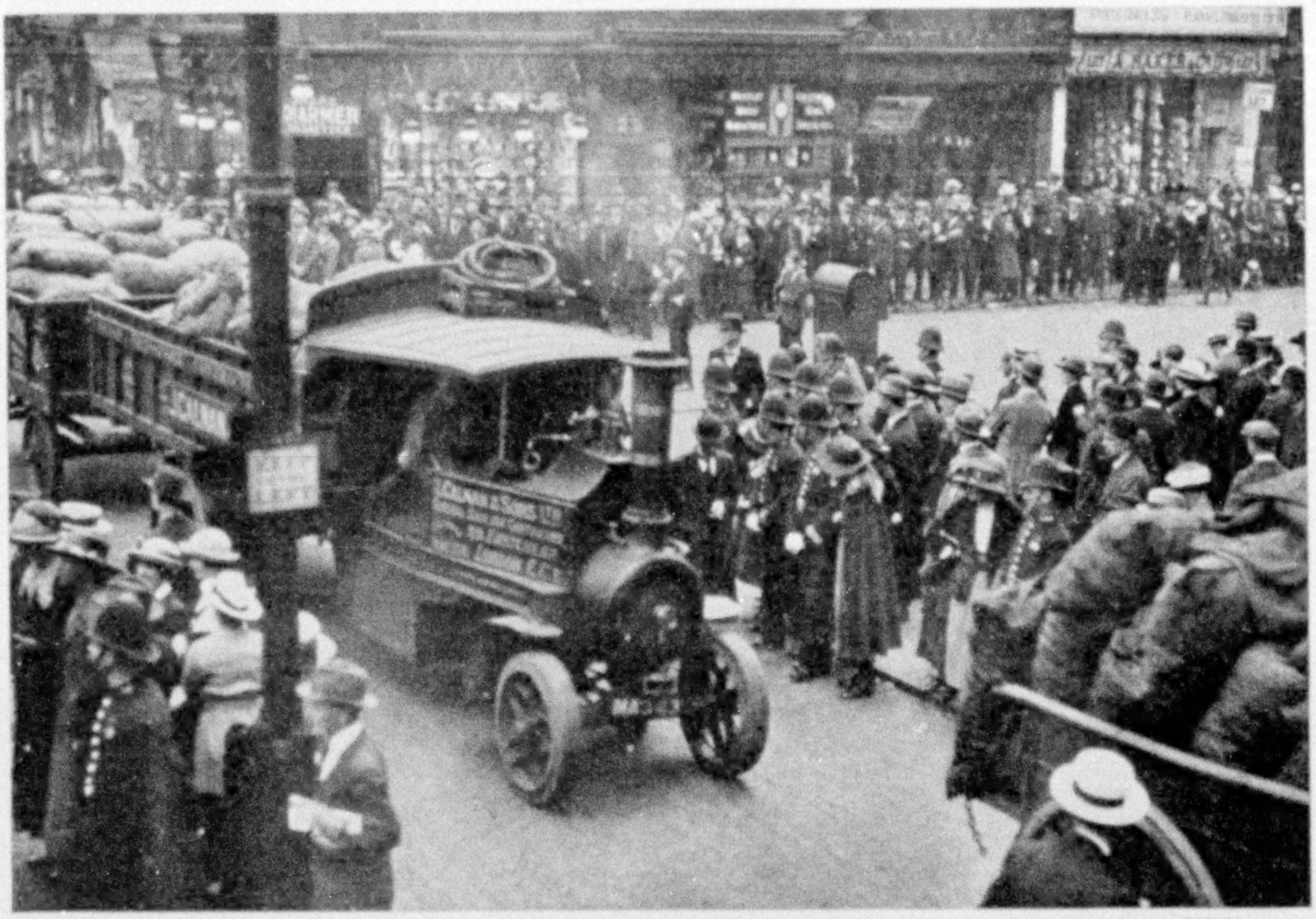
Over Covent Garden, a bit more to the left, one might sight the Bank of England and the heart of the old Roman city (see page 567).

Another turn left and the markets, the Charterhouse, the British Museum (see page 577).

Left once more and the theater district; Soho, where are the foreign restaurants beloved of novelists, and the fashionable shopping districts.

Just a bit more and clubland and Mayfair and a glance at Buckingham Palace (see page 576).

Then Hyde Park and the Admiralty



Photograph by Maynard Owen Williams

THE STEAM LORRY FEATURES LONDON'S "VEHICULAR MADNESS"

"One leaps from safety island to safety island across these streets, as if they were stepping stones in a torrent—omnibuses, steam lorries, donkey carts, limousines, the small barn-swallow-like cars which taxation has thrust upon English motordom" (see text below). The roaring traffic is made more perilous to American visitors by the English custom of the left-hand turn.

(see page 579), and the circle is complete. All reached best by busses.

A PLACE OF PERILOUS DELIGHTS

Trafalgar Square is a place of perilous delights. Eight streets, if my count is correct, debouch upon it, each filled with roaring traffic coming from unexpected angles, and made more perilous to an American by the English insistence upon the lefthand turn.

One leaps from safety island to safety island across these streets, as if they were stepping stones in a torrent—omnibuses, steam lorries, donkey carts, limousines, the small, barn-swallowlike cars which taxation has thrust upon English motordom, brewers' vans drawn by elephantine horses, screaming motorcycles with the latest editions.

One desires to pause long enough properly to admire the statuesque policemen directing this vehicular madness by waving large white-gloved hands, but to do so is to risk one's life. We retained an impression of stony benevolence. They made us think of kind monuments.

Once Trafalgar Square was the King's Mews, where various monarchs stabled their horses. Honest artisans shaped weapons for English gamecocks in Cockspur Street. Fronting on the Square is the National Gallery, crammed with treasures of art. Of all the 1,500-odd churches in London, the visitor is apt to carry away the most vivid memory of St. Martin's-in-the-Fields. The gray and white and black pillars of its majestic portico gain added value, of course, when seen across the open Square (see page 553).

But there is something more, or so it seems to me. Americans are often charged with an undue interest in royalty, for our critics do not comprehend that we regard a king as a spectacle, just as we do the Lord Mayor's Procession or a Beefeater in the Tower. Yet for one American who knows that the king owns a pew in St. Martin's, and that the royal children born in Buckingham Palace are registered

THE CRYSTAL PALACE

London's mighty monument of glass and iron was designed by Sir J. Paxton on the plan of a large conservatory. It is the scene of concerts, exhibitions, and festivals, and is a vast museum of sculpture and of objects of mechanical and scientific interest. During the World War the Royal Naval Division was trained here, and in 1919 it served as a demobilization station.

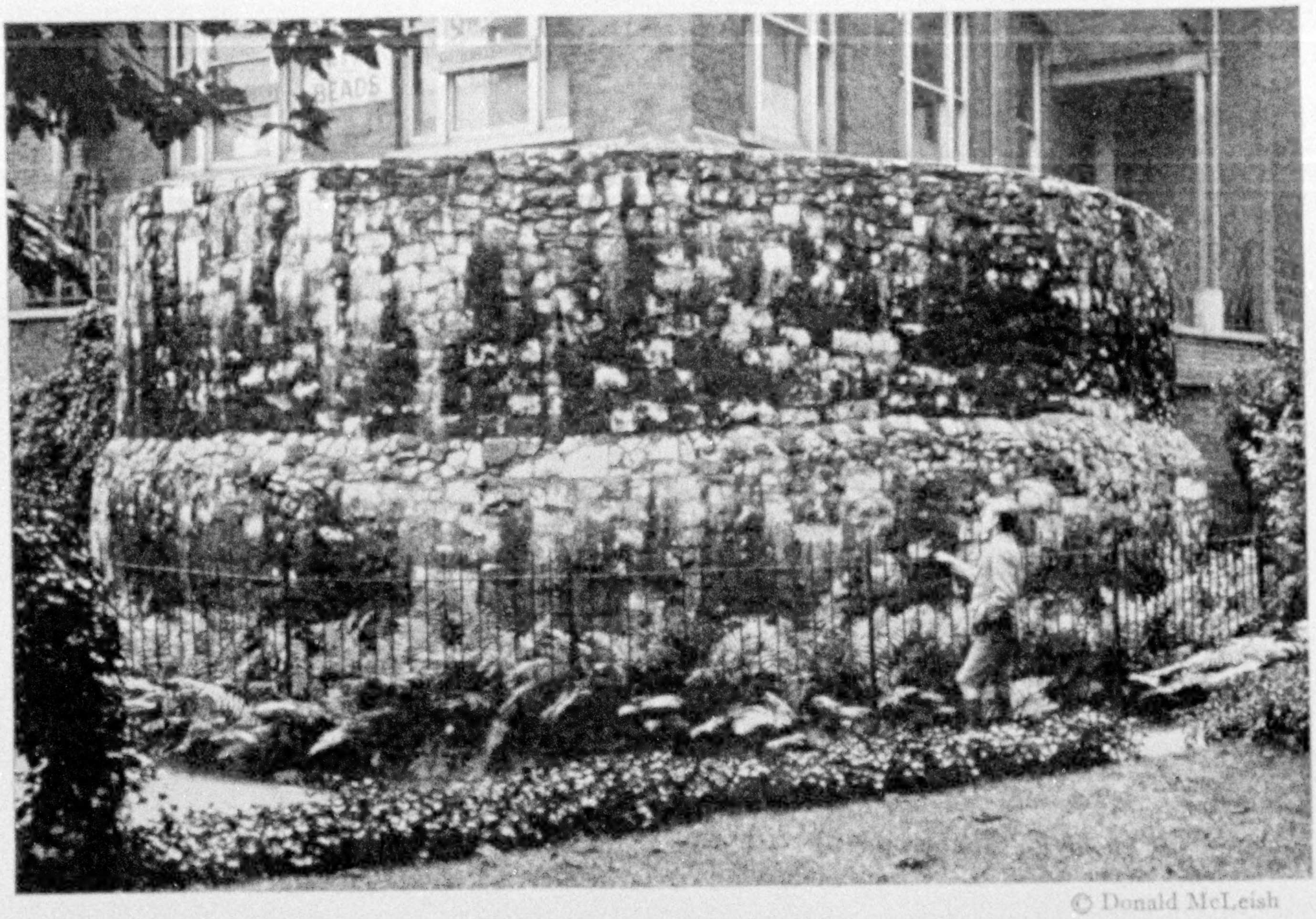
along with the sons and daughters of charwomen and night watchmen who also see daylight in Buckingham Parish, ten know that Nelly Gwyn lies buried there.

It is extraordinary, by the way, the influence this naughty little wench had on the London of her day. No one thinks of defending her. She is not even apologized for, any more than the Year of the Great Wind or Twickenham Ferry. She seems merely to be loved. The other day her thimble was found and identified in a house in Chelsea, and all London seemed to wear a half smile. The old women, who because they sell blossoms on the isles in Piccadilly Circus are called flower girls (see page 557), cherish her tradition. Americans, however, being doubly handicapped by a different accent and a suspected light-mindedness, will do well to approach these flower girls deftly. Some of them still uphold the bluffer English standards of retort.

One keys in to London's past and present at Trafalgar. Where Northumberland Avenue enters the Square stood that Northumberland House in which lived the lady of whom Suckling wrote,

> "Her feet beneath her petticoat
> Like little mice stole in and out";

and next it is the Constitutional Club, where men of the most extraordinary



© Donald McLeish

A BASTION OF THE ANCIENT ROMAN WALL IN THE CHURCHYARD OF ST. GILES

The wall which once encircled London was from 9 to 12 feet thick and 20 feet high and traditionally dates from the fourth century. The church is the burial place of John Milton.

Photograph by A. W. Cutler

A CORNER IN THE DOGS' CEMETERY

This curious burial ground, situated close to the Victoria Gate entrance to Hyde Park, contains only the pets of the aristocracy. It has been in existence some 40 years and was the idea of the late Duke of Cambridge. All the graves have neat stone borders and are planted with flowers.

dignity may be seen being served at table by pontiffs of a sort.

In a little house which once stood here Ben Jonson wrote "Drink to Me Only with Thine Eyes," which some people hold to be one of the finest ballads in the English language, though deprecating the sentiment. Heine and Ben Franklin and Charles Dickens have roomed close by.

THE MALL RECALLS TRAGEDY AND BITING REPARTEE

From Trafalgar, too, the visitor can peer through the fine Admiralty Arch down the Mall, at the farther end of which stands Buckingham Palace. Eventually he will discover this to be a large and almost violently ugly stone-fronted building behind a tall wrought-iron fence, and that time is wasted on it except during those stirring moments when the soldier guard is changed (see page 576).

Photograph by Maynard Owen Williams

LONDON'S FLOWER GIRLS HAVE GROWN UP (SEE TEXT, PAGE 555)

He may recall that it was down the Mall that Charles I walked to the headsman's block, and that it was named after the French game of *paille maille* that Charles II played upon it. But more interesting, to my mind, is the story of the colloquy between Queen Caroline and the elder Walpole. She wished to close St. James's Park, through which the Mall runs.

"How much would it cost," she asked, "to keep the public out?"

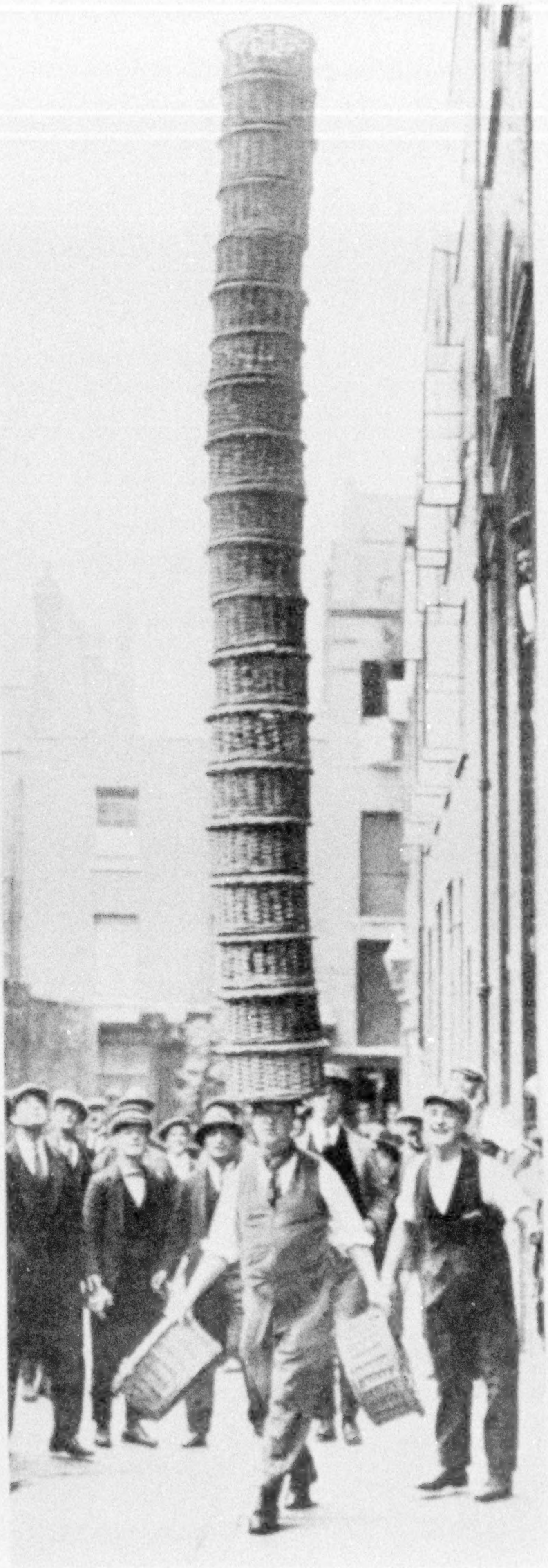
He replied with the most excellent courtesy,

"Only three crowns, Madame."

Almost in front of St. Martin's—it was truly in the fields when Nelly Gwyn was buried there—stands the hopelessly uninspired statue of Nurse Edith Cavell.

Across the Square is that of Charles I, perhaps the finest equestrian figure in London. One bridges centuries of English history by a glance at it. Queen Eleanor's Cross first stood upon this site—the twelfth, or was it the thirteenth?—cross erected by the sorrowing King Edward I to mark the places where her casket was set down for the night on the long route from Lincoln to her tomb in Westminster. That was in the thirteenth century.

The Puritans tore it down during the Commonwealth. After the execution of



International Newsreel

THE CHAMPION BASKET-CARRIER AT COVENT GARDEN

It is a gift rather than a trick to balance twenty bushel baskets on one's head and walk gayly through the crowd.

Charles I, his statue was sold by Parliament to a brazier to be melted down or broken up. The owner hid it in his back garden, however, and made a fortune by selling as souvenirs bits of old metal which were presumably fragments of the statue. Then royalty came again and it was placed upon its present site, which had first been prepared by the execution there of several regicides.

In the courtyard of Charing Cross Station—that place of heartbreaks, from which so many English soldiers left for France during the World War—stands a doubtful replica of Queen Eleanor's Cross. It is not much to look at, but it does at least recall a royal love story.

COVENT GARDEN HAS BEEN FAMOUS FOR FOUR CENTURIES

Much is to be seen hereabouts in the compass of a short walk before definitely embarking on a cruise through London's streets. A turn to the left leads to Maiden Lane, where Voltaire and Turner once lived. One may pause at Rule's oyster house for a snack, not because of hunger, but because this has been the resort of English actors since 1750. Fielding and Pope and Goldsmith used to frequent it when it was "The Bedford Head" and the home of the Reunion Club. A vast white painted door, set with brass like the quarter-deck of a yacht, a populous bar behind which two lively maids are busy, a great fire under a marble mantelpiece.

Just around the corner is Covent Garden, once the convent garden of the Abbey of Westminster. It has been the great market for fruits and vegetables ever since 1634. A lively, sad, industrious place, in which the costers' donkeys furnish the comic relief. Under the great Piazza, which was a century ago London's most fashionable walk, old women sit all summer long shelling peas. Something of a comedown from the patches and ruffles, the smallswords and the snuff.

IN THE HAUNT OF FAMOUS AUTHORS

It is to be feared the Covent Garden Opera has somewhat declined. At all events, when we visited the fine old house two jazz bands were offering interminable tom-tomming for a horde of dancers.

Here is Bow Street and its police sta-

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LONDON COSTERS IN FULL REGALIA

The coster has an entirely original style of dress, which is worn only on important occasions, such as upon attendance at the Derby or on bank holidays, at Hampstead Heath.

tion, where the scarlet waistcoats of the "Bow Street runners" gave the world its first idea of a uniformed police force—or so Bow Street says.

On the Russell Street corner is Will's Coffee House, where Dryden sat in judgment on plays, and which is just as it used to be, above the street level. Charles Lamb lodged at No. 20 Russell Street and the National Sporting Club, most aristocratic of boxing clubs, is at 43 King Street. At No. 4 York Street De Quincey wrote his "Confessions." I do not apologize for this guidebook-like catalogue. Half the charm of London is in its history.

Pass the Savoy and the Cecil hotels and dive down Carter's Lane to the Victoria Embankment, of which every writer on modern London has had something to say. All historic ground here. Here is the York Water Gate, far in on dry land, through which boats once landed wigged and furbelowed freight for York House. The Adelphi Terrace, built by the four brothers Adam on the Adelphi Arches, whose

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DECORATING THE PAVEMENT ON VICTORIA EMBANKMENT

The men who make pastel drawings on paving stones are known as "screevers." Some of them do really excellent work and make a very decent living from the pennies and sixpences that admiring passers-by throw to them. Victoria Embankment, where this man is at work, extends about a mile and a quarter along the west bank of the Thames, from Westminster Bridge to Blackfriars Bridge.

gloomy recesses may be here and there sighted. Once they were the haunt of London's most desperate characters.

WHERE THE BLACK PRINCE HELD A KING OF FRANCE PRISONER

Samuel Pepys once lived at the foot of Buckingham Street, and just across the way Tsar Peter of Russia had his lodgings as a ship carpenter. A very rough lot was Peter. London tradition still tells of the mess he made of the house, what with beef bones and broken bread on the floor and drunken Muscovites under foot everywhere.

Time has almost come to take the bus, but on the way back to the roaring Strand one must stop at the Savoy Chapel, rebuilt in 1505, sunk in a valley between great buildings and shaded by old trees. All that is left of what was once "the fayrest manor in England." The Black

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THE CONQUEROR'S NORMAN KEEP NO LONGER AWES LONDON CITIZENS: TOWER OF LONDON

The White Tower, built in 1078, is the central and oldest portion of the fortress; its walls are 15 feet thick at the base. This time-honored building of history and gloom has served as fortress, palace, and prison, its most pathetic memory probably being the murder of the Little Princes. It covers 13 acres.

Prince held King John of France a prisoner here until his death, for no one paid his ransom. Since Henry IV's time it has always belonged to the reigning house. Geoffrey Chaucer was one of John of Gaunt's retinue here.

To Americans on the watch for survivals from the olden days, however, the gemlike little chapel is not of so much interest, perhaps, as the fact that here sits annually the Court Leet, dating back to Saxon times. Once a year the jury of the court, headed by the beadle with his silver-topped staff, makes the rounds of the boundary of the manor. One mark is on the stage of the Lyceum, another in Child's Bank, one by Cleopatra's Needle, on the Embankment (see page 573), and a fourth on the lawn of the Middle Temple.

On the Strand we take Bus 15 A for

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WARDERS OF THE TOWER OF LONDON

This picturesquely uniformed body originally formed part of the Yeomen of the Guard of Henry VII. Their popular name of "Beefeater" should properly be reserved for the military corps of the royal household, which was so dubbed in 1669 by Count Cosimo because of the large rations of beef which its members consumed. Some features of the dress of the Yeomen warders date from the time of Henry VIII, who, according to a familiar anecdote, wished them to look as fat as he.

The City—capitalized, please—that square mile of money contained in the still traceable remnant of the Roman walls. Yet before mounting it is worth while to walk a few steps down a twisting, narrow lane, at No. 163a Strand, to the Roman bath.

One might, if permitted, bathe in the stream of cold water that has gurgled through it for perhaps 1,700 years. The bricks, set in place by the Romans, are still to be found under the surfacing of marble taken from the bath of the Earl of Essex, once upon a time the unlucky favorite of Queen Elizabeth. The Queen herself may have taken a morning dip between these stones, when they were in place in the Essex manor near by. Few know of this bath, somehow, and fewer visit it. One would like to know why.

SOMERSET HOUSE, WHOSE OWNER'S HEAD WAS CHOPPED OFF

As the bus rumbles and sways eastward, one sees two churches isolated in the center of the Strand—St. Clement Danes (page 571) and St. Mary-le-Strand. Their beauty leaps to the eye in the midst of the turmoil. And here is Somerset House, of which the tourist rarely hears, although to my mind this huge, gray-black 18th-century quadrangle is one of the most majestic structures in Britain. The Lord Protector Somerset began its predecessor in 1547, and one is not sorry to know that he did not live to finish it, for his arrogant lordship pulled down the cloisters of Old St. Paul's for building material.

Again we note that history is a living thing to its warders. Here wills are recorded and death duties paid and marriages registered, but to the old soldier at the gate the more important thing is that the Commons brought Somerset low. He positively smacked his lips:

"They chopped h'off 'is 'ead," he said.

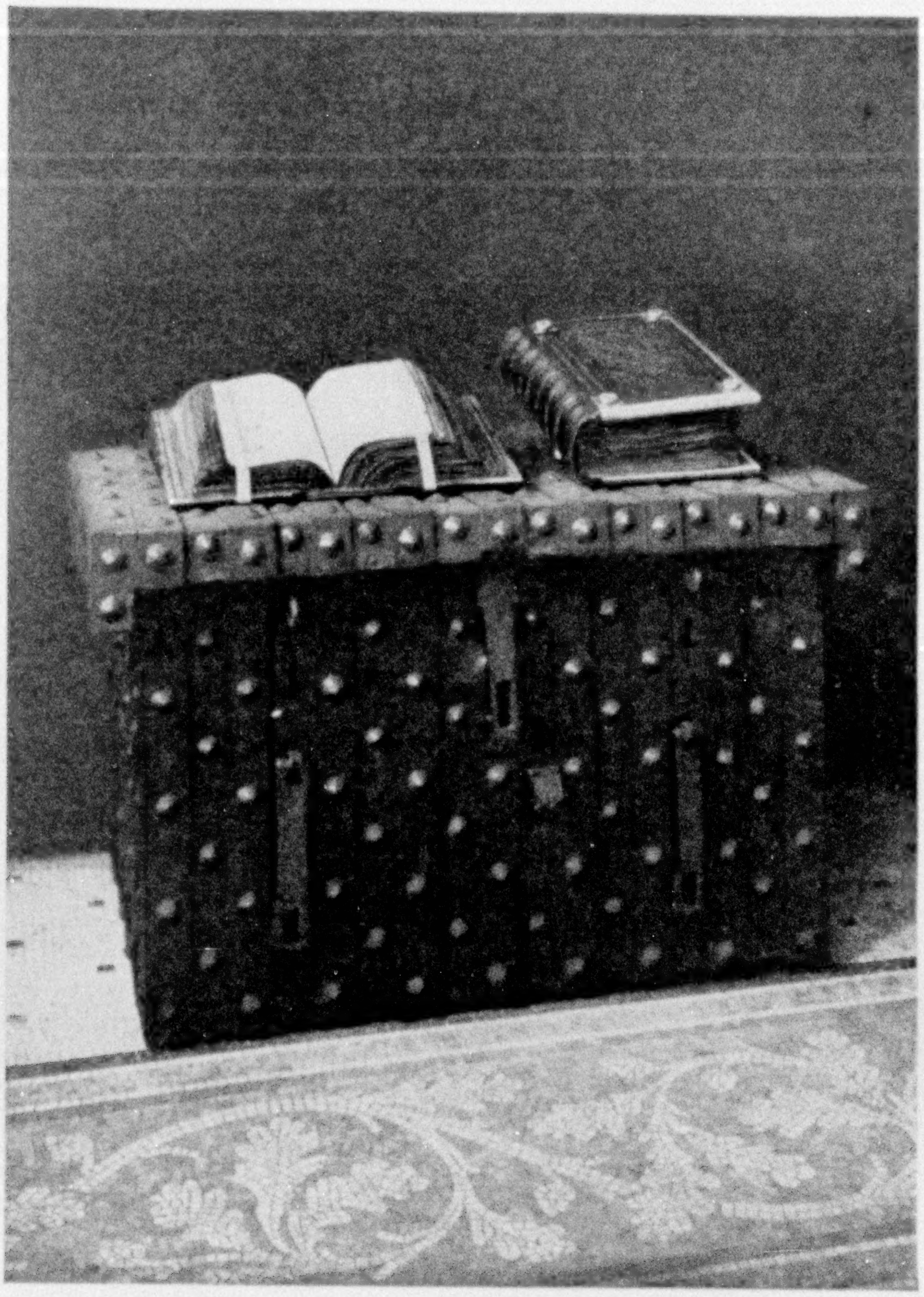
He told us the vaults beneath are three stories deep, and men sometimes get lost

in them for days. Because he wore a medal telling of gallantry in action—and was lame—I gave him an indefensible shilling. He immediately justified it:

"Sometimes," he said, "they do not get h'out for a fortnight."

WHERE FALSTAFF AND SHALLOW ROAMED

On past the Law Courts, which suggest a de luxe version of Coney Island. Here Temple Bar once stood, decked at intervals for centuries with the heads of patriots and traitors. Even now the King of England must ask permission of the Mayor of the City of London before he can pass Temple Bar. One may query what would happen if he did not ask, but the question is fruitless. He always will (see, also, pages 588 and 591).



© Humphrey Joel

THE DOMESDAY BOOK AND THE CHEST IN WHICH IT WAS FORMERLY KEPT

These two parchment volumes in the Public Record Office Museum contain the results of a statistical survey of England made in 1086 by order of William the Conqueror.

In the rear of the cheesecakery Law Courts once stood Clement's Inn, where Falstaff and Shallow "heard the chimes by midnight." One is disposed to abandon the bus here for a moment, only to find his steps drawn, as by a magnet, from one historic spot to another.

THE CHIEF SIGHT IN LONDON—THE DOMESDAY BOOK

Lincoln's Inn Fields, which one reaches through a maze of little streets behind the Law Courts, will be a surprise to me each time I see them, if that be ten times a day, for in the clattering center of the city they are as quiet as a country churchyard. In the 12 acres of the Fields duelists used to meet, but now peaceful oldsters dream away the days on the benches beneath the great plane trees.

Across the Fields lies the thirteenth-century Lincoln's Inn, where each night curfew is rung upon a bell brought from Cadiz in 1596 by the Earl of Essex. One walks down Chancery Lane to the Tudor Building, in which is the Public Record Office. It was in a previous incarnation the House of Converts, intended as a place of worship for apostates from the Jewish faith.

According to the materially minded ex-sergeant who acted as our cicerone, when the church authorities ceased to pay boun-

ties for captured souls the supply of converts ran out and the chapel was put to other uses.

It is here that I would come if I had liberty to visit but one place in London. Here is the Domesday Book (see page 563), in which every plow and spade in England was set down, much to the distaste of the ex-sergeant. He seemed to think that William the Conqueror might have been in better business. And here are the contrasting signatures of Guy Fawkes, which carry one back to the cruel old days. When he signed his first confession, weak from torture, he fainted just as he put pen to paper. Only a brown smear of ink represents the "Fawkes." A few days later, his pain-wracked body having been restored by rest, his hand was steadier.

The ex-sergeant was a cynic, I fear, for he hurried us to a letter written by the Earl of Essex while he was in disgrace with the Good Queen Bess. "Listen to the wye 'e signs it," said the guide, and, rolling the syllables under his tongue, he told them off:

> "Hast, paper, to that happy presence whence only unhappy I am banished. Kiss that fayre correcting hand which layes new plasters to my lightest hurts, but to my greatest woond applyeth nothing. Say thou camest from shaming, languishing, dispairing S. X."

The ex-sergeant smacked his lips.

"W'en 'e wrote that 'e was 32 years old and she was 69!"

If I were the King of England, which I will never be if I have my rights, I would hang the first shack-building speculator who laid an impious hand on Clifford's Inn. Yet the old inn of Chancery is going. Some of it has already been built over, and there is a "For Sale" sign on the rest, yet one can still see what a charming place — to the eye — medieval England must have been.

The crazy-flag walks that cross its cobbled pavements are growing with grass, for only an occasional messenger or a straying tourist marches on them now. A row of quiet houses remains, perhaps as they were when the inn was built, in 1345, for only one—No. 13 by a superstitious chance—was destroyed by the Great Fire in 1666.

Another equally aged row is to be found in Neville's Court near by, where are pre-fire houses hidden in tiny gardens behind brick walls. We found them while hunting for the Moravian Chapel, dating from the 1730's, and on which the Moravians hold a lease that has still 250 years to run. Not that this is at all surprising in London. Only the other day in Mayfair I found a fashionable house I might have for the term of 934 years.

Right alongside Clifford's Inn is Fetter Lane, where Praisegod Barebones lived, and one walks back to Fleet Street by way of Gough Square, in which is the house where Dr. Samuel Johnson, the tutelary divinity of this region, drenched with printer's ink, worked out his dictionary. It is furnished as it may have been in Johnson's time.

Before we climbed to the bus again we did what all Americans in London do, ate lark pie in the Cheshire Cheese. My heart misgave me at first, for a little, tender, innocent lark should not be sacrificed for a pie. But I feel better now, for the larks seemed to have been about the size of pigeons.

In any case, the Cheshire Cheese should be seen, for it has been preserved, alone among the public houses in London, so far as I know, as it probably was in Johnson's day, although the authority for declaring it one of Johnson's haunts seems to rest on insufficient authority.

"THE MOST BEAUTIFUL SMALL CHURCH IN CHRISTENDOM"

Through a tunnel-like passage we returned to Fleet Street, on the other side of which lies Prince Henry's Room. There is no proof that the boy ever lived here who said of Sir Walter Raleigh, "No one but my father would keep such a bird in such a cage," when Raleigh was in the Tower; but one is cheered out of spitefulness by the beauty of the room. The house was built in 1610 and by a miracle escaped the Great Fire.

Through a gateway one enters the Temple, with its memories of Goldsmith and Lamb. It was before a great fire in the Benchers' room that Sir Christopher Hatton so won Queen Elizabeth by his dancing that she took what is now Hatton Garden away from the Bishops of Ely and gave it to him.

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THE HUGE TOWER BRIDGE, "GATEWAY OF THE CITY"

The upper footbridges are 142 feet and the lower roadway 29½ feet above high water. The twin bascules of the central span, each weighing about 1,000 tons, can be raised in 1½ minutes for the passage of large vessels. A "curiously unbeautiful" structure, its Gothic towers nevertheless make it suitable in design for its location near London's ancient fortress.

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GREENWICH OBSERVATORY: CHIEF TIME-SETTER FOR THE WORLD

Practically every country in the world uses standard time differing from that of Greenwich by a whole number of hours or half-hours, though a few use the time based on the longitude of their national observatories. The time ball on the turret falls daily at 1 o'clock. The astronomical equipment includes a 28-inch refracting telescope and a 26-inch photographic telescope. The terrace commands a notable view of London and of the shipping in the busy Thames.

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THE TREASURE MART OF AN EMPIRE

The Bank of England (left), established in 1694, has been for centuries one of the greatest of the great financial institutions of the world. At one time, however, earlier in its career it had to resort to a strange ruse to tide over a run. It employed persons to present themselves at its paying windows with notes which the bank, in order to consume time, cashed in sixpences. As each agent thus received his money he left the bank only to enter by another door, redeposit the sixpences, and enact the whole performance over again. These agents so congested the bank that few of the *bona fide* holders of notes could get near enough to the counter to present them and the emergency was survived. In front of the Royal Exchange (right center), one of the strategic commercial centers of a great commercial nation, is the statue of the Duke of Wellington, cast from captured French cannon.

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SAINT-GAUDENS' LINCOLN IN BROAD SANCTUARY, WESTMINSTER

This bronze statue, a replica of the one in Chicago, was erected here in 1920 as a gift of the American people, in recognition of the 100 years of peace between Great Britain and the United States. Beyond it is St. Margaret's Church, which the House of Commons, until 1858, attended in state four times a year. Sir Walter Raleigh is buried in the chancel. The Broad Sanctuary is an open space where, in early days, persons sought the protection of the Church.

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THE CENOTAPH: WHITEHALL

Great Britain's memorial to "The Glorious Dead" commemorates with impressive simplicity her heroes killed in the World War. It rises in the middle of the roadway and was unveiled by King George on November 11, 1920, the second anniversary of the Armistice. It is surrounded by Government buildings, the War Office being discernible on the right and the Colonial Office on the left of the picture.

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FOUNTAIN COURT, IN THE TEMPLE, IMMORTALIZED BY DICKENS

Here came Ruth Pinch, of *Martin Chuzzlewit*, "with the best little laugh upon her face that ever played in opposition to the fountain and beat it all to nothing." Beyond the fountain is Middle Temple Hall, opened by Queen Elizabeth, where Shakespeare's *Twelfth Night* was played.

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LOOKING UP FLEET STREET FROM ST. CLEMENT DANES

In the tower of this church hang the famous bells referred to in the nursery rhyme, "Oranges and lemons, say the bells of Saint Clement's." Fruit is still distributed annually to children of the parish. In the right background rises the massive dome of St. Paul's; in the left foreground are the Law Courts.

© Donald McLeish

TRAFALGAR SQUARE AND THE MONUMENT TO ENGLAND'S GREATEST SAILOR

The column to the victor of Trafalgar towers 142 feet and is decorated yearly on the anniversary of the battle. The capital was cast from cannon of the *Royal George;* the bronze lions guarding the column's base were designed by Landseer.

© Donald McLeish

CLEOPATRA'S NEEDLE, ON THE THAMES EMBANKMENT

Mohammed Ali, Viceroy of Egypt, presented this obelisk of the time of Thothmes III, weighing 180 tons, to the British Government in 1819, but it was not brought to London until 1878. A companion obelisk stands in Central Park, New York City.

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BRITAIN'S VALHALLA

Westminster Abbey, the coronation church of England since 1066, is a national temple of fame (see text, page 552). Interment within its walls has long been considered the last and greatest honor the nation can bestow. To the left is the clock tower of Parliament House, containing the famous bell, "Big Ben." Between it and the Abbey is St. Margaret's Church.

© Donald McLeish

THE VICTORIA MEMORIAL IN THE QUEEN'S GARDEN

The seated figure of Queen Victoria (to the right) is surrounded by symbolic figures and crowned by a bronze Victory. The wrought-iron gateways of the colonnaded screen inclosing the garden bear the names and heraldic emblems of the principal British colonies. The memorial was unveiled in 1911.

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A ROYAL RESIDENCE

Buckingham Palace is the King's London home and takes its name from the Duke of Buckingham's house, which once occupied its site. When either the King or the Queen is in residence, the guard is changed daily, the occasion providing an interesting spectacle (see text, page 557). The band of the Welsh Guards is seen passing the Queen Victoria Memorial.

© Donald McLeish

TIME'S TREASURY—THE BRITISH MUSEUM

No other building on earth contains such a trove of historical and scientific treasure. It would take many years of constant study to become even passably well acquainted with the contents of this great national storehouse of knowledge. Perhaps the most interesting object in the museum is the famous Rosetta Stone, which contains the cipher that enables us to interpret the ancient languages of Egypt.

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LIVING STATUES

The mounted sentinels of the Life Guards at Whitehall are exceedingly picturesque and imposing figures. Both horse and rider remain motionless during their tour of duty, and no amount of tempting is sufficient to make them relax their statuesque pose. A favorite trick of visitors used to be to drop a half crown down inside the high boots, but it never induced a flicker of acknowledgment or a movement from the imperturbable guards.

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A CORNER OF OFFICIAL ENGLAND

The Horse Guards Building, on the right, occupies the site of the barracks of the original Horse Guards, organized by Charles II. The Admiralty Building, on the left, is the headquarters of the British Navy. Beyond the mortar (abandoned by Soult at the siege of Cadiz in 1812), with its carriage in the form of a dragon, is the equestrian statue of Earl Roberts, hero of Ladysmith and Britain's leading disciple of preparedness.

© Donald McLeish

STATUE OF "THE BOY THAT NEVER GREW UP": KENSINGTON GARDENS

Both youth and age visit this fanciful statue of Peter Pan, Barrie's beloved boy hero. Fairies and woodland creatures adorn the base.

We stood puzzled before the locked door in the wonderful vaulted entrance of the Temple Church, "the most beautiful small church in Christendom," wondering how we might get in to see the fine brasses and the cell of little ease in which tradition holds that refractory Knights Templars were confined for the betterment of their souls, when the problem was solved for us. One of the small, indomitable messenger boys, the like of which is bred only in London's streets, came and whanged upon a great wrought-iron knocker, just as the pages of crusading times may have done, and we entered diminished upon his scornful heels.

It should be recorded here that visitors to the Temple should seek acquaintance with the wigmaker. If he can spare time from daubing a whitish paste upon the wigs of barristers, he can tell a multitude of stories.

WHERE WILLIAM PENN WAS IMPRISONED

Change omnibuses at Ludgate, once an entry through the Roman wall and now a whirlpool of traffic. To the right New Bridge Street leads across Blackfriars Bridge, from which one may explore Bankside.

First, it is worth while looking about at Ludgate. Near by is the Congregational Memorial Hall, on the site of the Fleet Prison. William Penn was confined there, and unfortunate debtors once let down baskets from their cell windows, which charitable visitors filled with food.

Over the river is The Ring, an octagonal building intended for a chapel, "with no corner in which the devil might find a hiding place," and now the center of London's more popular boxing activities. Fifty rounds of excellent boxing may be seen from a ringside seat there for little more than a dollar. The visitors wear caps, which is an admission of social submersion in England, but the fighting is clean.

It was in Bankside that William Shakespeare acted in Richard Burbage's Globe Theater. Was it hereabouts that he began his career as a horseboy? So tradition tells.

The temptation in London is always to devote oneself to inquiry about a single locality. Here stood the rings in which bulls and bears were baited. In the Liberty of the Clink, one of the remaining names, actors barred from the other side of the river by the moralists of the day were permitted to follow their vocation.

Sir William Walworth, once mayor of London, owned "stew-houses" in Bankside, that being the euphonious early English name for bathhouses. The dagger with which he killed Wat Tyler is still to be seen in the Fishmonger's Hall, near the monument commemorating London's Great Fire of 1666.

Not far away is Battle Bridge Lane, where the Romans defeated Queen Boadicea in a pitched battle, and by hunting about one may find the galleried remnants of the old George Inn in a railroad yard.

We hold fast to the bus and return to Ludgate, to carry on through Cannon Street. St. Paul's Cathedral is certainly the third, and perhaps the fifth, great fane to stand on this site. Perhaps a Temple of Diana preceded them. The Cathedral still holds the estate of Tillingham in Essex, which was granted it in the seventh century.

Near by are Paternoster Row and Carter's Lane and the Old Bailey, where stood the prison of that name, and in which Oliver Goldsmith lived "in a wretched, dirty room in which there was but one chair." Knightrider and Giltspur streets got their names because the knights rode through their narrow lengths on their bedizened way to the tournaments at Smithfield.

I must admit that St. Paul's always leaves me cold, in spite of its wealth of historical associations and the fact that it is Sir Christopher Wren's greatest achievement. Perhaps it is because I resent those who visit cathedrals to experiment with whispering galleries, and that I regard with a certain curiosity others who are willing to climb 627 steps for the privilege of being cooped up with nine others similarly minded in the gilded ball that tops the dome (see page 584).

I am more interested in the indecently fat pigeons which coo and bully around the statue of Queen Anne near by, or in London Stone in Cannon Street, embedded in the walls of the church of St. Swithin, clerk of the weather. It is sup-

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"TOSSING THE PANCAKE": WESTMINSTER SCHOOL

This scramble, known as the "greeze," takes place on Shrove Tuesday, the time allowed being one minute. The boy who secures the largest fragment of the cake is rewarded with a guinea from the dean. Their Majesties, the Prince of Wales and the Duke of York, are watching the struggle with great amusement. Refounded by Queen Elizabeth in 1560, this public school is now more than five centuries old and has a long list of famous pupils.

posed the Romans measured the distances on their highroads from this old stone.

WHERE THE STARS AND STRIPES MAY HAVE ORIGINATED

The bus carries us through Cannon and Fenchurch streets to Aldgate, once a portal in the city walls.

At once is an embarrassment of riches. Whether to visit St. Botolph's Institute and find on one of the monuments of the Legge family, with which George Washington was connected, what is probably the earliest representation of the Stars and Stripes, or turn down the Minories to the Tower of London? On that route is the Coal Exchange, in which one may see the fire-blackened bricks of a Roman bath, and the monument marking untruthfully the place of origin of the Great Fire (see, also, text, page 581).

Likewise Billingsgate Market is here, where the city buys its fish. The language of Billingsgate is refined nowadays, almost to the point of culture. Since the days of Queen Elizabeth three Dutch eel boats have enjoyed the right of mooring in the stream. It is an odorous way we pass, but we find them. Always one must remain at the moorings, to hold the right.

Let us remain on the bus during this first scouting expedition. To the left we may glance down Houndsditch, once a fetid moat outside the city walls. Hereabouts live the Dutch Tenters, Holland Jews, who have been for 200 years among the most valued citizens of the city, and in the signs over the bars in Aldgate High Street one sees the sole remainder of the coaching inns from which the lumbering wagons set out each week day for all parts of England.

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"DON'T FEED THE DROMEDARIES!": LONDON ZOO

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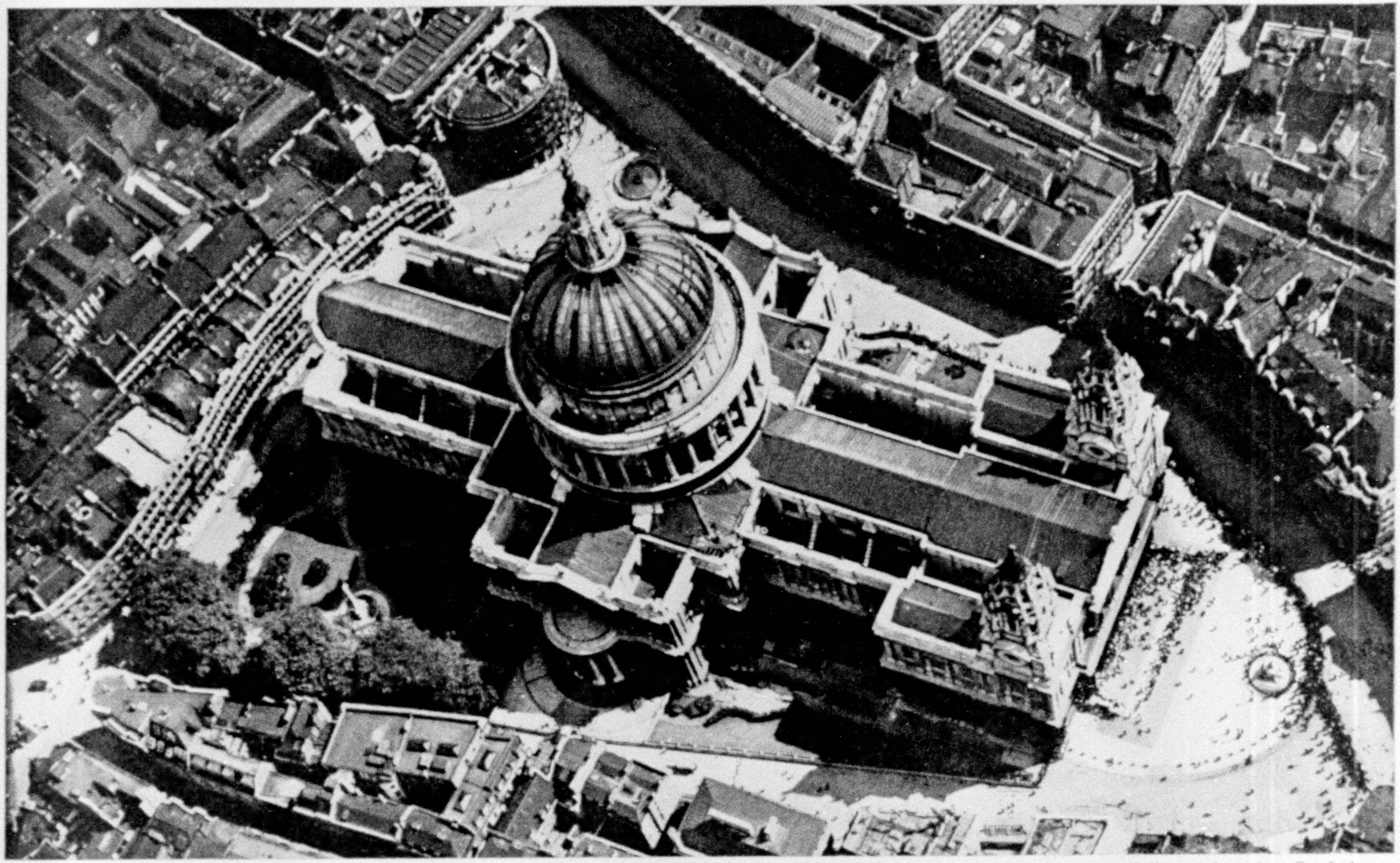
ROTTEN ROW, HYDE PARK (SEE TEXT, PAGE 593)

The name of this famous bridle path is possibly a corruption of *Route du Roi* (King's Drive). It is an excellent sand track reserved for riders, who may gallop without much danger of a fall. On fine Sundays the "church parade" after the service and before luncheon takes place on the footpaths on both sides of the Row and attracts crowds of sight-seers.



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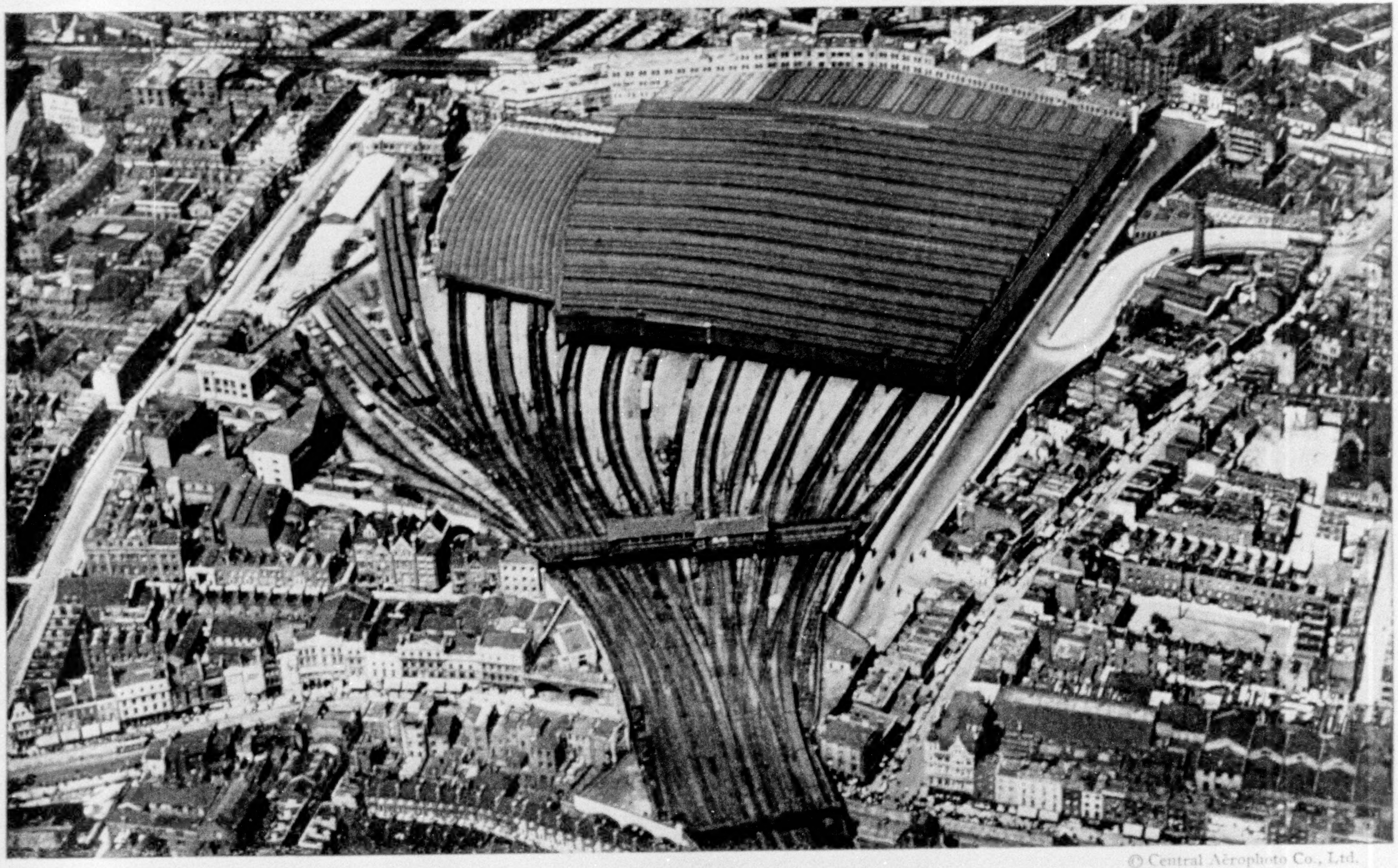
THE BEAUTY IN PROPORTION AND PERSPECTIVE OF ST. PAUL'S CATHEDRAL CAN BE APPRECIATED ONLY FROM AN AIRPLANE

The masterpiece of Sir Christopher Wren is so hemmed in by streets and houses that it must be "loved from a distance," preferably from the river, where its great dome looms forth in all its majesty. In this national cathedral England has enshrined or commemorated many of her soldier and sailor sons and other illustrious dead. St. Paul's has also been the scene of ceremonials of national mourning and rejoicing, notable among the latter being a service held in 1917 to celebrate the entry of the United States into the World War (see, also, text, page 581).



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THE AIRMAN'S VIEW OF THE LARGEST RAILWAY DEPOT IN THE BRITISH ISLES

More than 1,100 trains are handled daily from the 21 platforms of Waterloo Station, which covers an area of 24½ acres. Reconstruction of the terminus was completed in 1922, at a cost of more than $9,700,000. Architecturally, Waterloo Station is one of the finest in the world. A noteworthy feature of the new building is the Victory Arch War Memorial, incorporated in the north entrance and commemorating the 585 employees who lost their lives in the World War.

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AT NELSON'S TOMB IN ST. PAUL'S

Of a Sunday morning Petticoat Lane is still the most interesting spot in London. It is here that one goes to buy back his stolen dog, or to lay in a supply of chickens, cats, white mice, jellied eels, Eastern silks, or camels for the coming week. Once I saw a bear offered there. Elephants have been sold on its exchange.

One does not walk through the Sunday morning crowd here. One takes a long breath and commits himself to the stream, at the imminent peril of his buttons.

It was with some trepidation that we bussed it down the Commercial highroad from Aldgate in search of the Limehouse Causeway and Penny Field. This is London's Chinatown. We sniffed the air for the black smoke, we listened for the sounds of murder, we peered into each open door for one of the "broken blossoms" we had been led to believe haunted these thoroughfares of vice. The streets were dirty, sordid, and uninteresting. As for danger: "Ho!" said a large, red-faced policeman. "They be-'ave themselves better than Christians."

True, here and there a bland Chinese smoked a cigarette and we sometimes glanced into closepacked rooms where Orientals of sorts sat reading, sewing on buttons, and playing odd games.

Back to the bus for the long, jolting return to Aldgate and a pedestrian excursion to St. Olave's Church in Hart Street, one of the few churches that lived through the Fire. Here worshiped Samuel Pepys, the diarist—whose name, by the way, was pronounced peepes in his day—and it is

We ride on down Whitechapel and the Mile End Road, whereabouts the Hebrew population mostly centers. One may walk for blocks of a Saturday night here and hardly hear a word of intelligible English. Immensely interesting, colorful, and fragrant; also, well behaved. I am forever being disappointed in the quality of London's wickedness.

PETTICOAT LANE, THE MOST INTERESTING SPOT IN LONDON

St. George Street was once the Ratcliff Highway, in which not a night passed without a cold-blooded murder. Now one is safe. A bit of asking will find Middlesex Street, which was once Petticoat Lane. Why, one wonders, should these old names be changed?

© Donald McLeish

WORLD-FAMOUS REGENT STREET

This finest of London thoroughfares was constructed, under act of Parliament of 1813, to provide direct access from Carlton House, the residence of the Prince Regent, to the Regent's Park. The architectural character of the street has been greatly changed since the World War by the erection of imposing retail establishments similar to that at the right of the picture.

there that he caused to be set up the portrait bust of his rather ill-used young wife.

In a corner we found the monument erected by the Davison and Newman families. "But why?" we asked of the verger, who regarded us breathlessly.

"They are the tea merchants whose cargo was dumped in Boston Harbor," said he, "and brought on the American Revolution; and only yesterday I bought my tea from the same firm."

ALL HISTORY AND NARROW STREETS

It wasn't worth while to debate his American history. We got back on the bus, to go through Leadenhall and Cornhill toward the Bank (see page 567).

Nothing but history here—history and a myriad narrow, twisting streets, through which pattered a multitude of busy men. Why do the English sneer at our American hurry? Surely the New Yorkers themselves do not pant more breathlessly through their days than these city dwellers.

We ask a policeman—all visitors to London are forever asking policemen and are always courteously answered—and he tells us where to find the sights.

Lloyd's new building, where the associated agents will issue insurance policies against any conceivable disaster—(fire

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WHEN THE KING OF ENGLAND "VISITS" THE CITY OF LONDON

His Majesty is addressing the Lord Mayor after receiving at the latter's hands the City sword. This ancient ceremony takes place at Temple Bar (see text, page 563). By this token royalty is given permission to pass through the City gates.

insurance was invented after the Great Fire)—the Mansion House, official home of the Lord Mayor, the Guildhall, the Royal Exchange.

When one tires, there is a survival of the real old English ordinary in Simpson's restaurant in Bird-in-Hand Court. If a person guesses the height, girth, and weight of the giant cheese which stands at the chairman's right, the house stands cigars and champagne for all hands. It has been done several times in Simpson's 200 years.

We are, somehow, making a rapid way through Cheapside, by a miraculous co-operation of chauffeur and policemen and rapid side-skipping by pedestrians. Cheapside was once the market for all little things in medieval London. Here the pageants passed on their way to the tilting grounds, apprentices fought, thieves sat in the stocks.

The names of the streets around tell their own story to us rumbling past. Milk Street, Wood Street, Goldsmith Street, Honey Lane. As early as 1277 Friday Street was the place of the fishmongers.

It was from No. 37 Cheapside that John Gilpin traditionally set out on his ride. John Milton was born near by, Chaucer lived here; Shakespeare, Kit Marlow, Beaumont and Fletcher met for wine and witticisms in the Mermaid Tavern in Bread Street.

It was the bells of Bow Church that called to Dick Whittington to turn again.

ON THE WAY TO FASHION AND SOPHISTICATION

Now we are fairly on our way to the London of fashion and sophistication. Yet in London one is never out of touch with the past. In Newgate Street we thump past the site of Newgate Prison, where malefactors condemned to death were confined.

When the bells of St. Sepulchre near by sounded, the hangman placed the condemned wretch, heavily ironed, in the open cart that was to take him to Tyburn Gallows through the eager streets. All the night previous a hand bell had been rung, to remind him that he must die with all his sins upon him. A benefactor of the day had left a sum of money in his will to that end, and another sum to pay the services of a clerk to keep the ringer up to his job.

We take another bus at Farringdon Road for a visit to the Charterhouse. Half a dozen centuries of history in this lovely old structure, which is, perhaps, the finest example in England of what a nobleman's home of the first order used to be. It was to the Charterhouse that Thackeray's Colonel Newcome came to end his days, and fifty brethren of the Charterhouse live there to-day in the peace and dignity to which age is entitled after a life filled with honor.

Not five minutes' walk away is the gatehouse of the Priory of the Order of St. John. Even the hurried passer-by must pause to admire the solid grandeur of Prior Docwra's building. Then, perhaps, he will do as we did, and continue on the bus to Hampstead Heath, the best of London's open spaces. Here the Spaniards Inn may be found, and Jack Straw's Castle, with pistols said to have been Dick Turpin's hanging on the wall. Or continue on the bus along Oxford Road, pausing again where Charterhouse Street opens into Holborn Circus; for there is Ely Place, won by Sir Christopher Hatton by his dancing.

Every vestige of the palace of the Bishops of Ely has been swept away, but each night the iron gates of Ely Place are locked, as they have been for 600 years, and a gold-laced watchman goes on his rounds to cry, "Past ten o'clock and all's well."

At Tottenham Court Road one may journey to the Caledonia Market, Hogartian in atmosphere, where, two days a week, things of no value whatever are sold at commensurate prices. It should be seen, if only to mingle with the lively, laughing, cockney crowd. Yet prizes are sometimes found. A patient seeker picked up for sixpence the silver model of a sixteenth-century galleon, and a soldier bought for a trifle an almost complete set of armor.

"It made my little nipper larf," he explained.

THE LEGEND OF THE STOLEN SNAIL

Of an evening it is worth while wandering down Soho Street to see the foreign restaurants.

© Topical Press Agency

THE LORD CHIEF JUSTICE AT THE OPENING OF THE LONDON LAW COURTS

© Topical Press Agency

A QUAINT CUSTOM HONOR'D IN THE OBSERVANCE

After morning service on Good Friday 21 aged women of the poor may pick up a new sixpence which has been laid on a certain flat gravestone in the churchyard of St. Bartholomew-the-Great. The custom originated in 1686 from a bequest left by a pious woman to provide doles for widows. The gift is also supplemented now by a shawl, hot-cross bun, and a half-crown.

© Topical Press Agency

THE KING'S TRUMPETERS

A fanfare sounded by the Household Cavalry announces the arrival of Their Majesties into the City (see, also, page 588).

Romance—of a sort—leaps to the eye here, and one may find the best and the worst of cookery, remembering that no writer of fiction of modern London has failed to place at least one scene in this lively setting. My own most vivid recollection is of the Stolen Snail.

We had wandered in one night to a little French restaurant, which almost alone in London purveys the snails of Gascony to the cultivated palate, to find the host in the depth of despair. For weeks, as the little Gascon explained, he had kept a giant snail alive on lettuce leaves in his display window, as a guarantee of the quality of his goods. That very night a roisterer had admired "that admirable animal," and when the servitors looked the other way he had abducted it. Months afterward we passed that way again, to find the memory of the great snail undimmed. Never, never, said the mourner, would his eyes light upon the like again.

Oxford Circus may be taken as the very center of the fashionable shopping district. A turn to the left and the bus charges down Regent Street, long the greatest shopping street in London, and cherished in memory for the fine old buildings which lined the Quadrant at the Piccadilly end. It is now in course of reconstruction, and London mourns; yet to the eye of the stranger the change is for the better (see page 587). Given half a century of London's grime and the new structures will outdo the old.

Through Piccadilly Circus, the center of the theatrical district. Here is the largest restaurant in the world, if the boast of the proprietors is justified. Through the Haymarket, which was not so many years ago, as time is measured in London, a haymarket in fact. A snuff house which was established there in 1720 is about as it always has been, except that the stone treads, worn out in the passage of years, have been renewed.

To the left is Panton Street, bought by Colonel Panton when he won enough in a single night's play to give him an income of fifteen hundred pounds a year. To the day of his death, in 1681, he never touched another card, so they say.

We have returned to Trafalgar Square,

© Donald McLeish

THE CHILDREN'S SANCTUARY

As beautiful Kensington Gardens are not open to vehicular traffic, they provide a safe and popular resort for young children playing under the watchful eyes of their nursemaids and guarded by no less a sprite than "Peter Pan" himself (see page 580). The gardens cover an area of 275 acres and were once the private grounds of Kensington Palace.

as one always does return—down Charing Cross and Whitehall to Westminster Abbey and the Houses of Parliament. One passes ranges of severe government offices.

A CROWD ALWAYS STANDS ADMIRING BEFORE THE HORSE GUARDS

Here is Downing Street, in which, at No. 10, the Prime Minister lives during his term of office. Always a crowd stands about, admiring the two gigantic sentinels of the Horse Guards.

Old Scotland Yard, where Scottish kings were quartered once upon a time, and which later became the headquarters of the far-famed C. I. D., and New Scotland Yard, where the Criminal Investigation Department now has its being. The old Banqueting Hall, through a window of which Charles I walked to his death on the block, and which harbors a small but

interesting museum. And, of course, the Cenotaph (see page 569).

Time presses apace, and so I shall not dwell upon what all men know of the Houses of Parliament, at the foot of Whitehall, or of Westminster Abbey, except to relate one little story, which is no less human to me than those of kingly loves and hates one finds commemorated in stone. Our scholarly guide paused at the grave of Thomas Parr.

"A simple villager," he mused. "Known to fame for one thing only, and that is that he lived through 152 years."

Our guide had pondered this at some length, it seems. He could not understand why such an utterly inconspicuous man should have been interred in Westminster Abbey, and by dint of much seeking in records he found the secret.

"He had been hale and hearty in his little village," he said, "when the king heard of him and would have him brought to court, that the royal eyes might look upon this rugged peasant who had for so long defied death. Two weeks of feasting at the court put an end to him. So they buried him here."

Back to the bus again at Victoria Station, and on through Buckingham Palace Road. If we veered to the left, we would find our way to Chelsea, with its ever-present memories of Carlyle and Whistler and Sir Thomas More.

NELL GWYN'S GIFT TO OLD SOLDIERS

All Chelsea is thronged with memories, yet to my mind the loveliest place of all is the one the wanderer is most apt to miss. It is the Physic Garden, given in 1722 to the Society of Apothecaries by Sir Hans Sloane, "so that apprentices and others may better distinguish good and useful plants from those that bear resemblance to them and yet are hurtful."

And it is regrettable, but little Nelly Gwyn's pert visage may be discerned peering through the mist of the centuries, for there is a tradition that it was she who induced Charles II to establish the Chelsea Royal Hospital, where old soldiers whose military records are unimpeachable and who are all alone in the world wait for the end in a sadness that pierces one to the heart. These one-time hearty old men, with all their memories of foray and violence.

By this street and that the busses make their way from Chelsea to the Kensington Gardens, on the Kensington Road, wherein is set the Kensington Palace, where Queen Victoria was born. I believe that a few pensioners live in the palace and it is assuredly worth visiting, if only to discover the appalling taste of royalty in furnishings and art two or three generations ago.

ONE OF FOUR SUNDAY-MORNING SIGHTS NOT TO BE MISSED

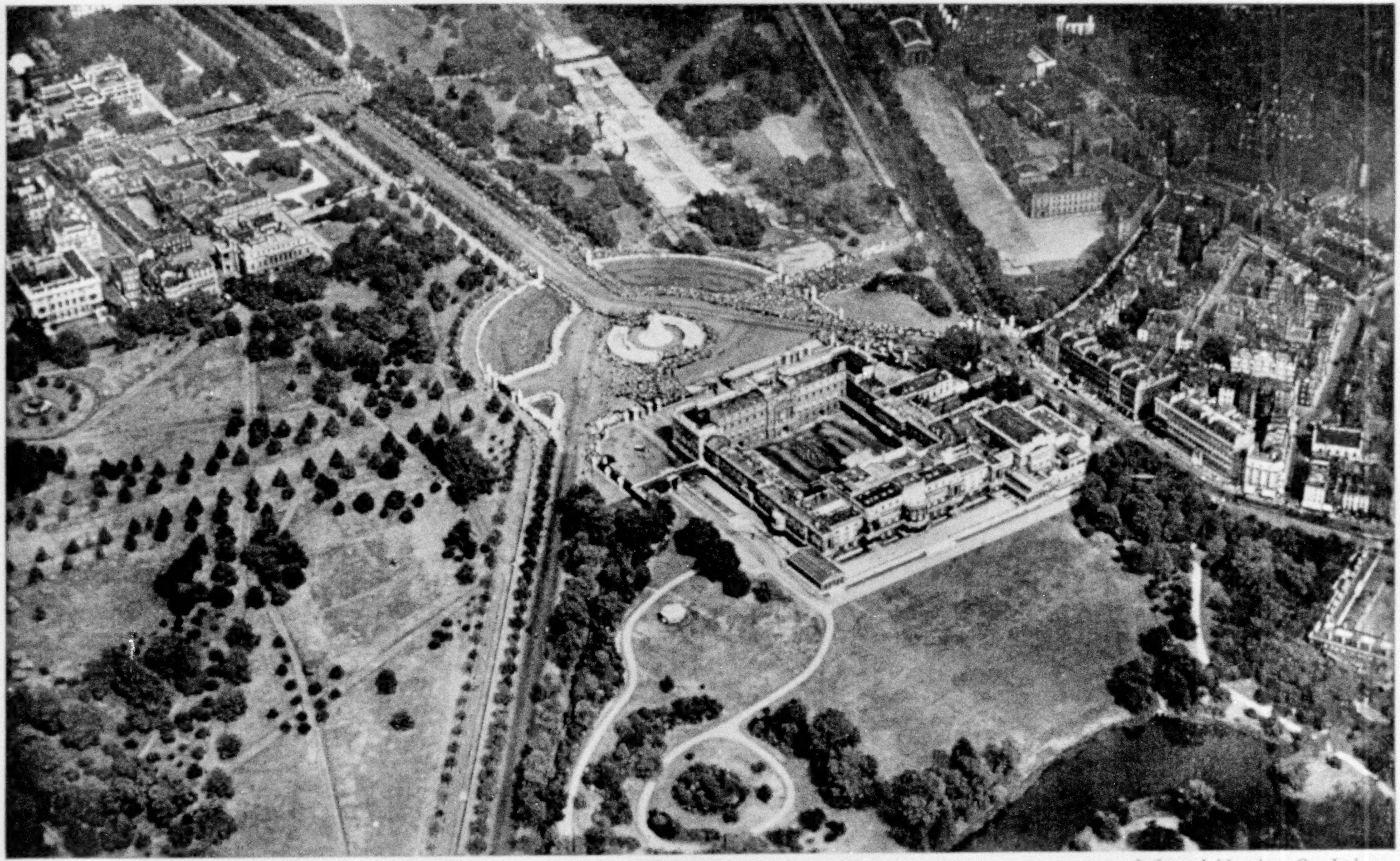
Down Kensington and Knightsbridge roads, past Hyde Park, where of a Sunday morning every man in London who wishes to render vocal his opposition to any existing scheme has full permission to do so. One strolls with the crowd, to hear feuds centuries old, perhaps, disinterred and their indecent fragments exposed to the jeers of the listeners. Next to the speaker some one has a new religion. Ten feet away every established form of government is being assailed.

This is one of the four Sunday-morning sights that must not be missed, even by the most hurried visitor to London. The others are the Petticoat Lane market, the gallopers in the bridle paths in the park—although the elder aristocracy is little by little abandoning this morning show to the newcomers—and Tattersall's. There the men and women from the country, in London to attend court, or to shop, or for the social season, revive their fainting selves by a whiff of the horsy air. It is a new view of England one gets in discovering a putative duke being gently, but with decision, rebuked by a bench-legged groom.

A bus to the left at Apsley House, if you will. Apsley House, which was given to the Great Duke by the nation in recognition of his services. Then up Park Lane to the Marble Arch. Hereabouts every house has its history.

Straight on through Piccadilly. One dismounts at St. James's Street to walk down a gentle incline to the gatehouse of St. James Palace. The western part, now known as York House, is the official residence of the Prince of Wales.

Strangers are not precisely invited to linger here, but it is recognized that the house and its occupant are objects of legitimate public interest; so, wanderers



© Central Aërophoto Co., Ltd.

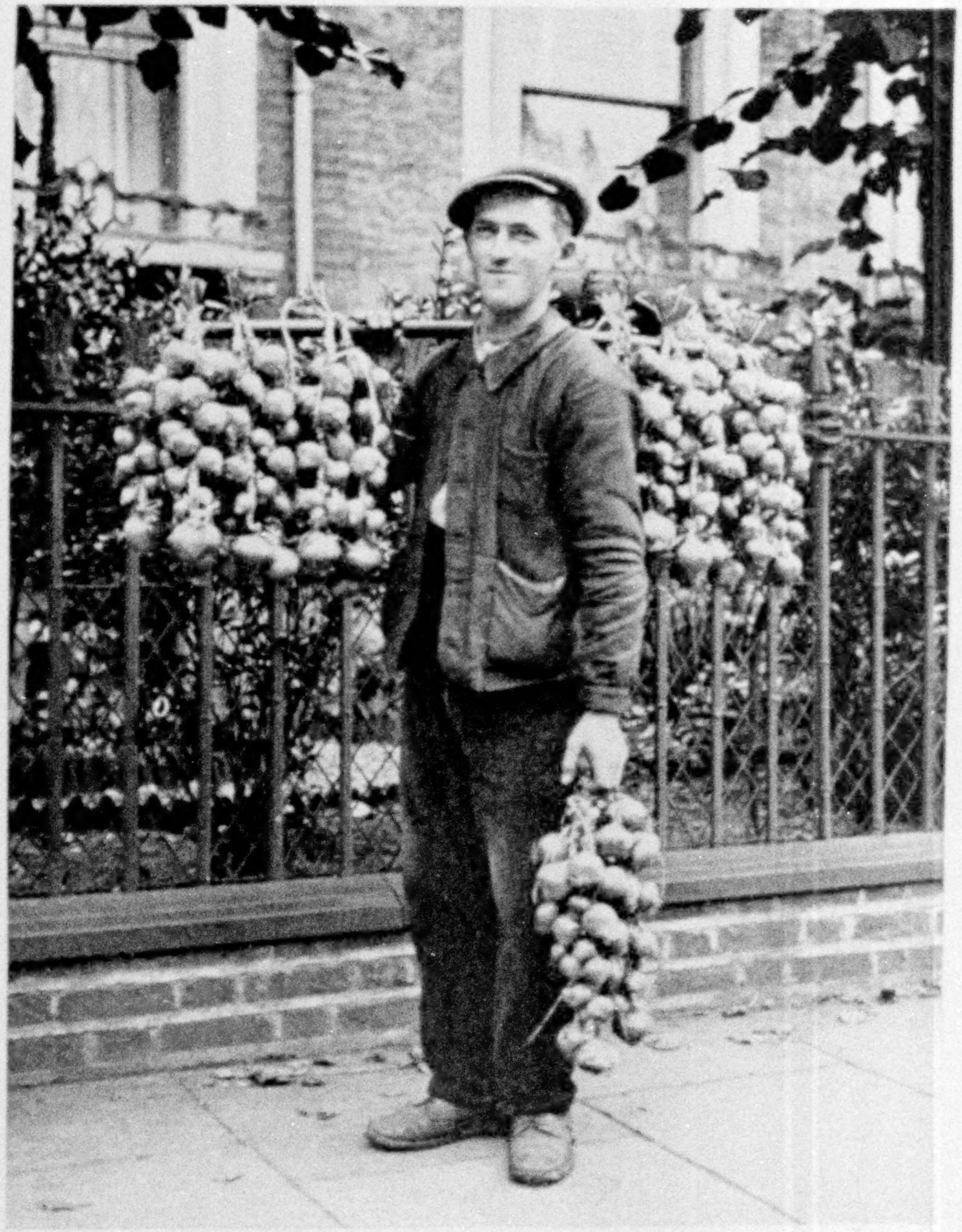
THE RETURN OF THE PRINCE OF WALES TO ENGLAND DRAWS CROWDS TO BUCKINGHAM PALACE

At the west end of the Mall stands this "large and almost violently ugly stone-fronted building behind a tall wrought-iron fence," the London residence of British sovereigns since 1837. Immediately in front is the Queen Victoria Memorial (see pages 575 and 576). This was formerly the site of the Mulberry Gardens planted by James I to foster the British silk industry.

Photograph by Maynard Owen Williams

"AND SO BACK TO TRAFALGAR SQUARE"

The traveler who adopts the omnibus method of seeing the world's largest city, with its 7,000 miles of streets, has at his disposal more than 230 bus routes and nearly 5,000 busses. Most of these are operated from 7 a. m. until midnight, and the fare inside and on top is the same.



© Donald McLeish

A LONDON "ONIONEER"

Onions are brought to England from Brittany in small sailing vessels. The men who sell them set out each day, carrying strings of the pungent bulbs, and return each night to the ship for additional supplies. The life picture of London's street sellers makes a story in itself.

may, if they wish, comment on the modest lace curtains in the lower windows of the Prince's home and even stand about in the court and watch for the scion of royalty to come out to his car. The English are very patient, sometimes, especially with foreigners.

By a turn to the left one may find Pall Mall, the heart of clubland; or to the right to find the London Museum, to me the most interesting in London. Here one may trace England—the British Empire, for that matter—right from its beginnings. In the basement are the remains of a Roman galley found in the Thames and of a dugout canoe, hollowed by fire, which may, perhaps, have served as a Saxon ferry across the stream before the Romans came. Here, too, are the leg irons of Newgate Prison, the handbills of the executions, and the black room in which so many listless debtors carved their names wearily in the oak. The guard will find for you the name of one—poor devil—who seems to have been held in the debtors' prison three separate times.

We cross Piccadilly to find Bond Street, the world's most famous shopping district—a narrow thoroughfare, down which busses rumble with bare passing room; narrow pavements thronged with happy people; enormous gilt-laced doormen, tiny gilt-laced pages; windows filled with jewels; goldsmith's work, the best of the past and the most expensive of the present.

Turn through a byway to find St. George's, Hanover Square—another of the extraordinary oases of quiet in the heart of London. The fine old church will be familiar to the eye, because its picture appears so often in the accounts of fashionable weddings.

BACK TO THE STARTING POINT

And so back to Trafalgar Square.

The itinerary has been incomplete, of course. How could it be otherwise? There are 7,000 miles of streets in London, which shelters 7,500,000 people in nearly 1,000,000 houses.

He who would more completely explore the Greater City will find 231 distinct bus routes at his disposal, on which almost 5,000 busses are operated. Yet I believe the traveler will find in it much of the best of London, especially if he have the flair for odd things of no actual value. Then will he dismount on Oxford Street at Selfridge's and make his way to Hertford House, home of the Wallace Collection, where in a wilderness of beauty he will find a tobacco pipe labeled as Sir Walter Raleigh's.

First, he should know history; then know London's history; then be both humble and indefatigable; and, lastly, take a bus.

THE COLOR SUPPLEMENT WITH THIS NUMBER

"THE BOYHOOD OF RALEIGH," which is issued with this number of the NATIONAL GEOGRAPHIC MAGAZINE, is an accurate reproduction by means of natural-color photography of Sir John Millais' famous geographic canvas which hangs in the Tate Gallery, London.

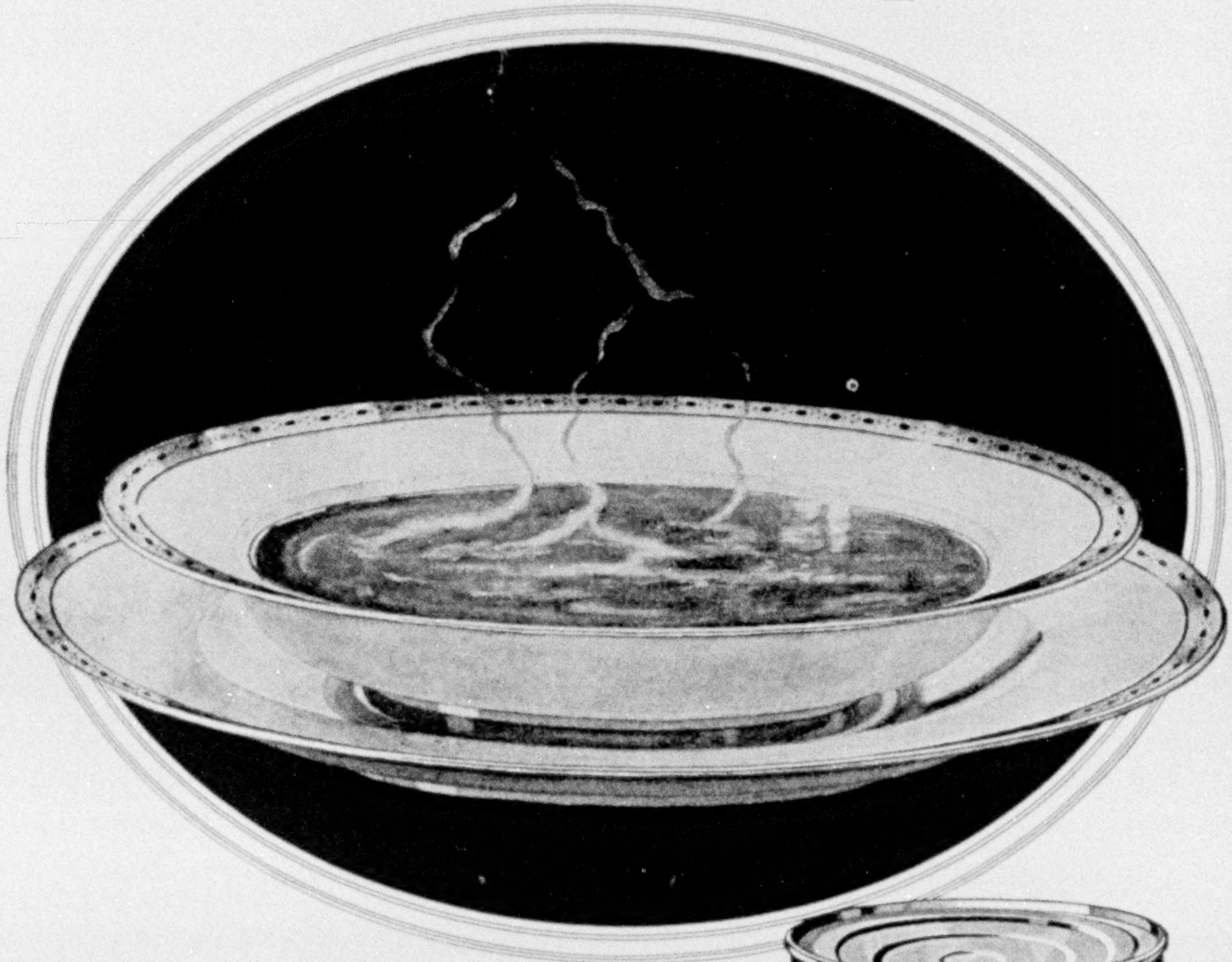
A Genoese sailor, bronzed and rugged, has as his audience for his vivid tale of adventure in distant lands and on distant seas young Walter Raleigh and his brother, who listen with rapt attention to the unfolding of wonders to be found in foreign climes. A toy ship beside the boys suggests the voyages that their imaginations have often taken. A starfish, a rusty anchor, and strange birds of brilliant plumage lend atmosphere to the scene.

As one studies this picture he can well imagine that some such romantic sailor's yarn furnished the first inspiration to the indomitable Elizabethan whose dauntless spirit quickened England into colonizing activity in the New World.

This picture is the first of a series of paintings of the great explorers to be published as supplements to the NATIONAL GEOGRAPHIC MAGAZINE.

An early issue will contain a reproduction in colors of a painting of Columbus at La Rabida just before he departed on his voyage of discovery. This will be followed by an autochrome reproduction of a painting showing the distinguished Portuguese explorer, Vasco da Gama, at the Court of the Zamorin of Calicut.

There's a glow of sunshine in this invigorating **Tomato Soup!**



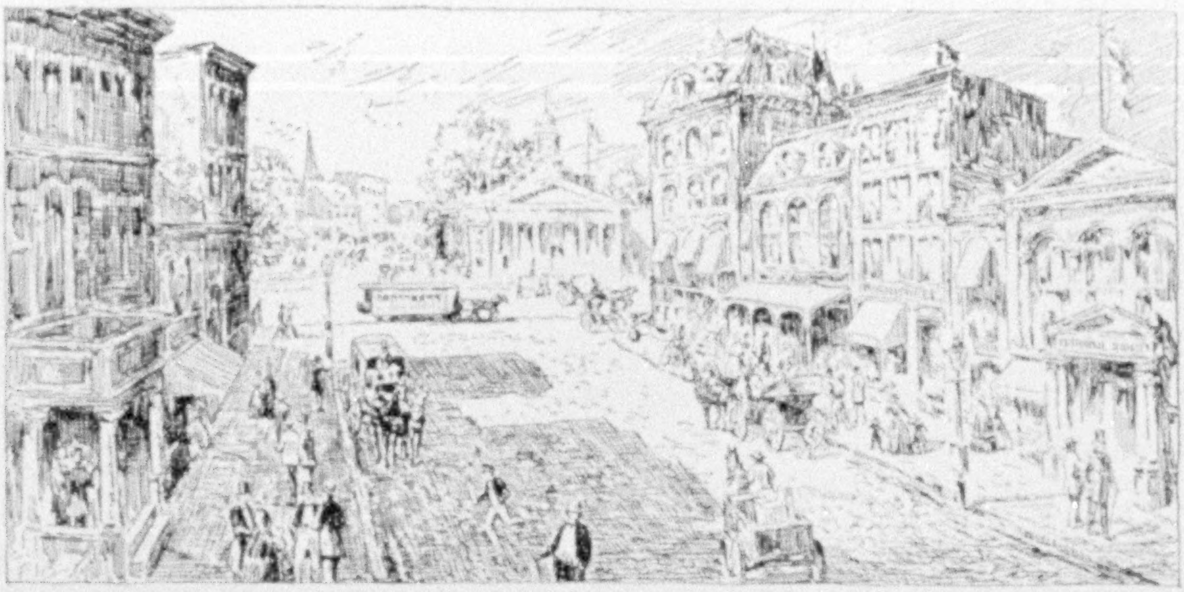
The bright color tempts and invites! The very first taste refreshes. And there's tonic and invigoration in every spoonful of this famous Tomato Soup!

All the rich tomato goodness—the appetizing juices and nourishing tomato "meat"—in a smooth puree. Country butter, fresh herbs and dainty seasoning are blended in and the soup is cooked in tureens of pure nickel to yield the finest flavor.

A real treat! A soup that appeals to the whole family! Splendid for the children!

12 cents a can

Look for the Red-and-White Label



The Telephone and Better Living

Pictures of pre-telephonic times seem quaint today. In the streets were horses and mud-splashed buggies, but no automobiles and no smooth pavements.

Fifty years ago homes were heated by stoves and lighted by gas or kerosene lamps. There was no domestic steam heating or electric lighting, nor were there electric motors in the home. Not only were there no telephones, but there were no phonographs, no radio and no motion pictures.

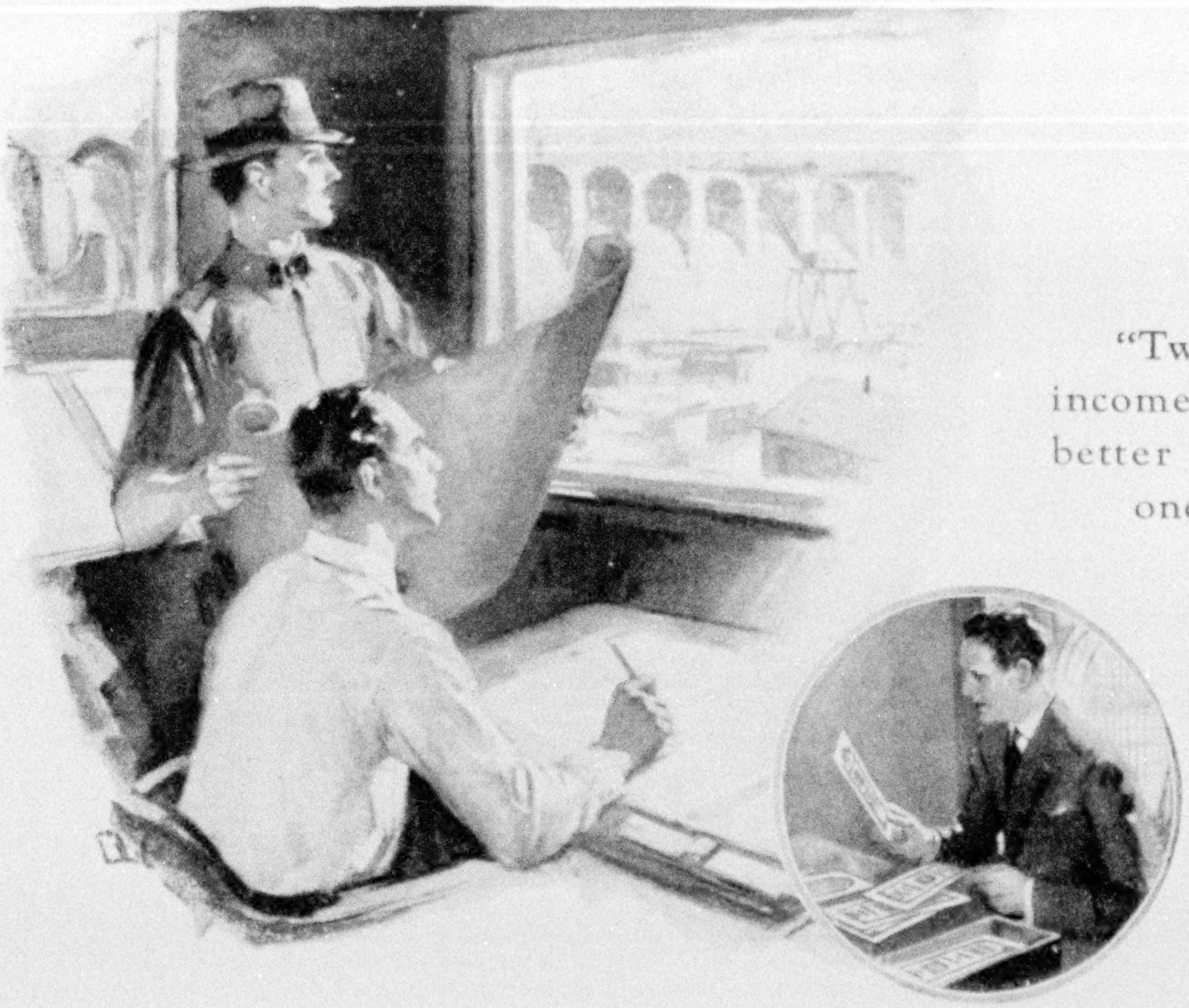
The telephone permitted the separation of business office from factory and made possible the effective co-ordination of widespread activities by a centralized organization. It changed the business habits of the Nation.

The amazing growth of the country in the past fifty years could not have come had not science and invention supplied the farmer, manufacturer, business man and family with many new inventions, great and small, for saving time and labor. During this period of marvelous industrial progress, the telephone had its part. It has established its own usefulness and greatly accelerated the development of the industrial arts which have contributed so much to better living conditions and to the advancement of civilization.

American Telephone and Telegraph Company
and Associated Companies

BELL SYSTEM

IN ITS SEMI-CENTENNIAL YEAR THE BELL SYSTEM LOOKS FORWARD TO CONTINUED PROGRESS IN TELEPHONE COMMUNICATION



"Two incomes are better than one"

Putting your dollars to work

WHENEVER there is a waterfall to be harnessed, an industry to be developed, a public improvement to be made or a new human want to be satisfied, dollars are invited to go to work for their owners.

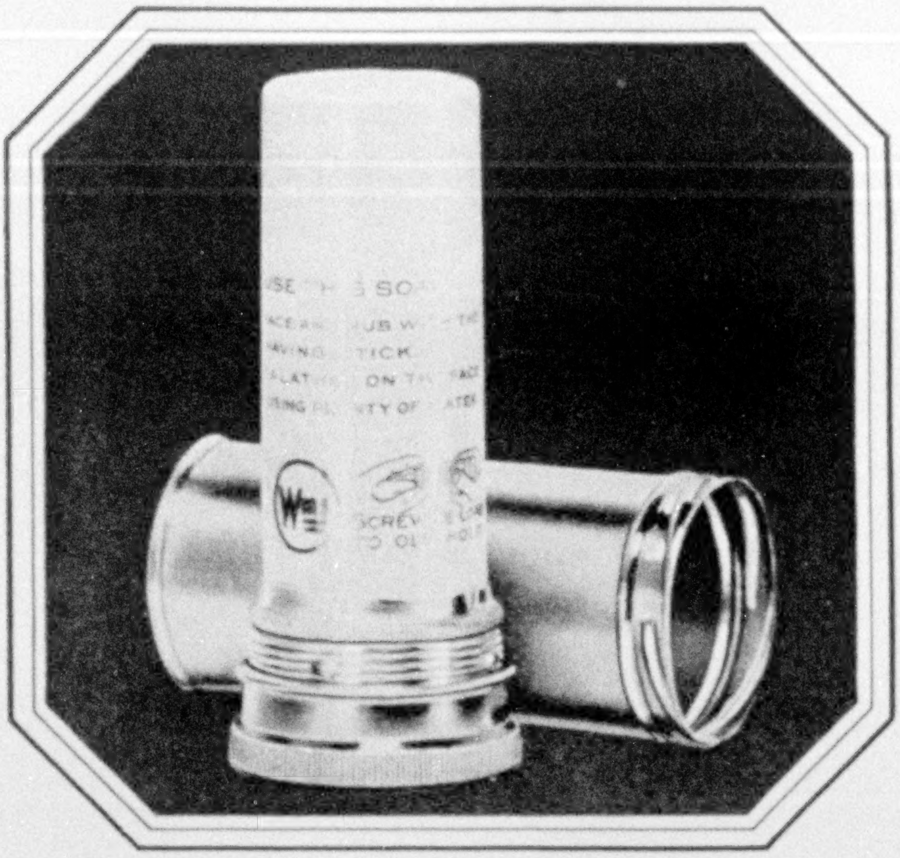
The best way to keep your dollars busy is to invest them regularly in the bonds of worthy enterprises. Thus employed, they will produce a second income, a dependable income which continues regardless of how your own personal earning capacity is affected.

Our offices in fifty leading cities are ready to advise you in the selection of suitable offerings.

The National City Company

National City Bank Building, New York

BONDS ACCEPTANCES SHORT TERM NOTES



Attention *to every little detail helps make Williams Holder Top Stick a favorite. For instance, the cover, shown here, locks fast with a quarter turn and stays on until you want to take it off.*

The lather *stays* MOIST—

the stick won't work loose in its holder

Millions of men have been Williams users during all the three generations we have been specialists in making shaving soap. For those who preferred Williams saturated lather in stick form, we perfected the Holder Top Stick.

This is different from other sticks in that the soap itself is gripped securely by a metal ring which screws snugly into the Holder Top. This means that the stick can't work loose in the holder—that when it is worn down, the wafer of soap comes out cleanly, without muss or jamming.

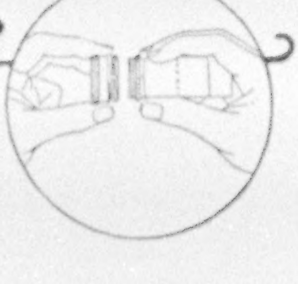
This extraordinary soap works up quickly into a rich, bulky shaving lather simply *saturated* with moisture. Soaks the beard soft for easy shaving.

We make Stick, Cream, Powder, Tablet—four forms—one lather—Williams.

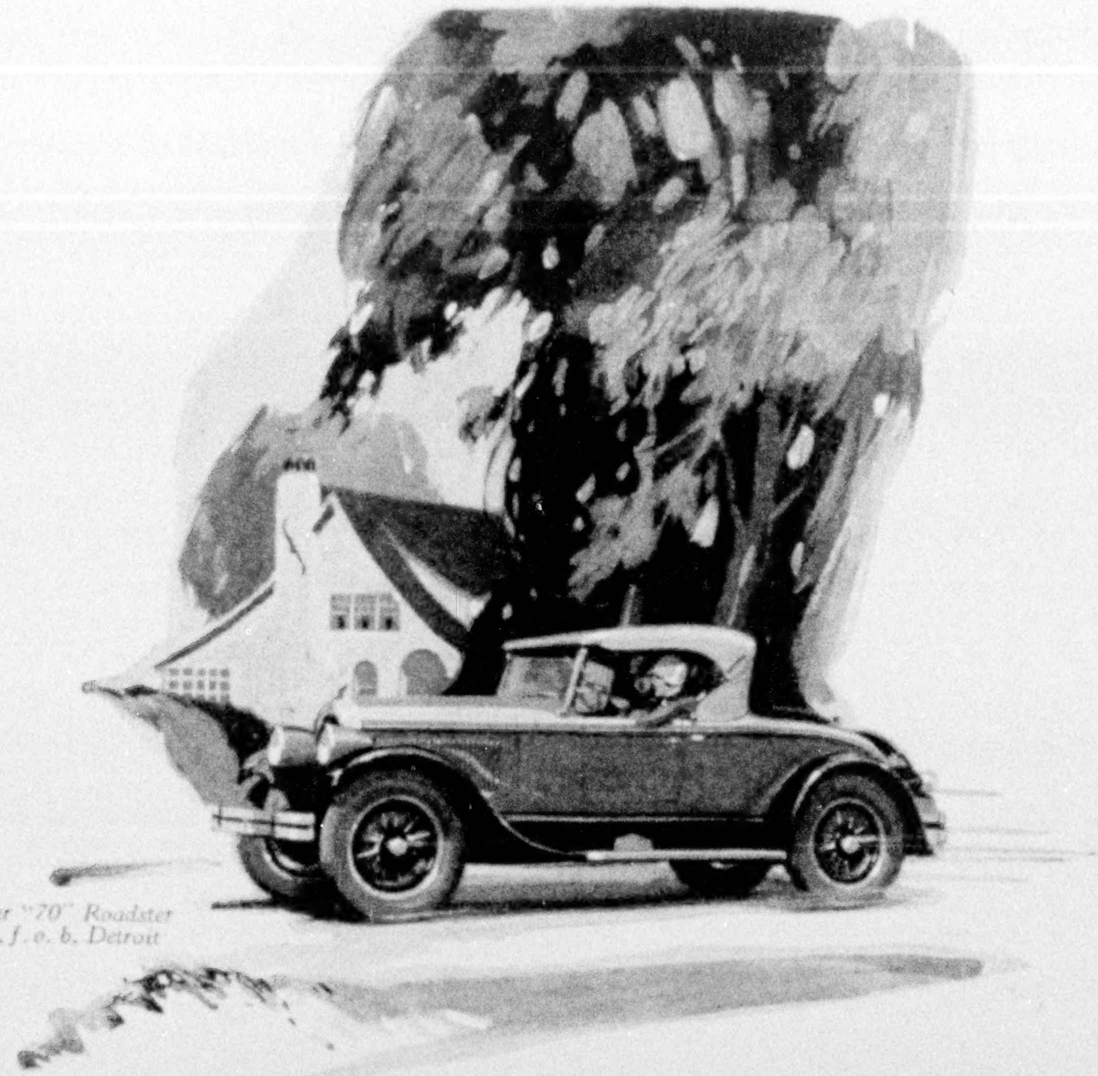
Aqua Velva is our newest triumph—a scientific after-shaving preparation. A few drops keep the face like velvet all day. We will send a generous test bottle free. The J. B. Williams Co., Dept. 55, Glastonbury, Conn. (Canadian address, 1114 St. Patrick Street, Montreal.)

Williams

Holder Top Shaving Stick



This *diagram shows how the threaded metal ring on Williams reloads screws firmly into the Holder Top. Buy reloads—they cost less than the original stick.*



Chrysler "70" Roadster
$1625, f. o. b. Detroit

MEN AND WOMEN WHO KNOW PREFER CHRYSLER "70"

The most conclusive endorsement of the inbuilt quality of Chrysler "70" is given by men and women who for years drove the costliest cars that America and Europe could produce.

These men and women have unhesitatingly expressed preference for Chrysler "70", discarding their bulky and cumbersome equipages for the verve of Chrysler performance, Chrysler compactness, Chrysler roadability and the magical ease and comfort of Chrysler operation.

It is the singular union of these qualities—found only in Chrysler "70"—which appeals so convincingly to those who know and appreciate true motor car superiority.

CHRYSLER SALES CORPORATION, DETROIT, MICHIGAN
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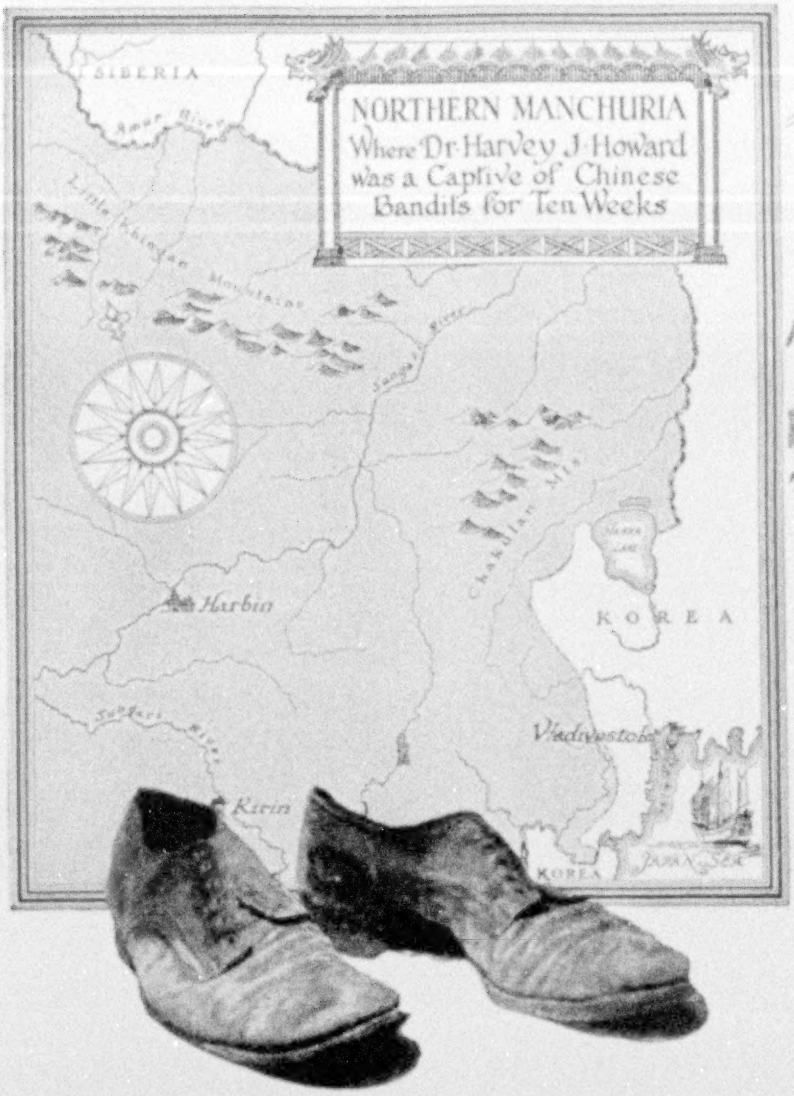
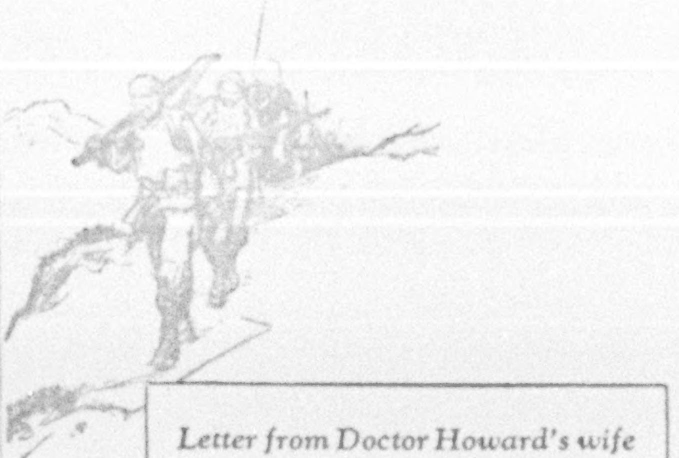
CHRYSLER "70"

CHRYSLER "70"—*Phaeton, $1395; Coach, $1445; Roadster, $1625; Sedan, $1695; Royal Coupe, $1795; Brougham, $1865; Royal Sedan, $1995; Crown Sedan, $2095. Disc wheels optional.*
CHRYSLER "58"—*Touring Car, $845; Roadster Special, $890; Club Coupe, $895; Coach, $935; Sedan, $995. Disc wheels optional. Hydraulic four-wheel brakes at slight extra cost.*
CHRYSLER IMPERIAL "80"—*Phaeton, $2645; Roadster (wire wheels standard equipment; wood wheels optional), $2885; Coupe, four-passenger, $3195; Sedan, five-passenger, $3395; Sedan, seven-passenger, $3595; Sedan-limousine, $3695.*
All prices f. o. b. Detroit, subject to current Federal excise tax. All models equipped with full balloon tires.

There are Chrysler dealers and superior Chrysler service everywhere. All dealers are in position to extend the convenience of time-payments. Ask about Chrysler's attractive plan.
All Chrysler models are protected against theft by the Fedco patented car numbering system, exclusive with Chrysler, which cannot be counterfeited and cannot be altered or removed without conclusive evidence of tampering.





Letter from Doctor Howard's wife to the Boston Cantilever Store

Peking, China, October 21, 1925.

DEAR SIRS:

The object of this letter is not to make the commonplace statement that your shoes have proved highly satisfactory, although such has been the case. It is to express the gratitude of my children and myself to the manufacturers of the Cantilever shoe, for their share in bringing my husband safely and well, through ten weeks of terrible hardship with bandits in Manchuria during the past summer and autumn.

On the day that he was captured, Doctor Howard had on his light-weight Cantilever oxfords which he had already worn a year without having had a single repair. In spite of the fearful abuse which these shoes received day and night during his long, strenuous captivity, they held up to the very last.

The bandits marveled at my husband's shoes which looked so incapable of hard usage but which never gave out, while theirs were breaking down every day. If his shoes had given out, there were no others to take their place.

Although my husband almost worships these precious shoes, I am nevertheless sending them on by registered parcel post for you to see and to keep among your relics.

[Signed] RENÉ HOWARD
(Mrs. H. J.)

A pair of shoes that saved a life

Dr. Harvey J. Howard's thrilling adventure with Chinese bandits

WHEN Dr. Harvey J. Howard of the Rockefeller College at Peking, was captured by Manchurian bandits on July 20, 1925, he was wearing the Cantilever oxfords pictured above. For ten exciting weeks these shoes were subjected to the most extreme kind of wear. Through swamps and rivers, over wild rocky country, into almost impenetrable forests, these shoes protected Doctor Howard's feet and helped him to keep going. They undoubtedly saved his life because in shoes less comfortable or durable, his feet would not have permitted him to stand the grueling pace of the bandits; and a prisoner who interfered with their flight would have been murdered and left in the path of the pursuing soldiers, set in motion upon demand of the U. S. Government.

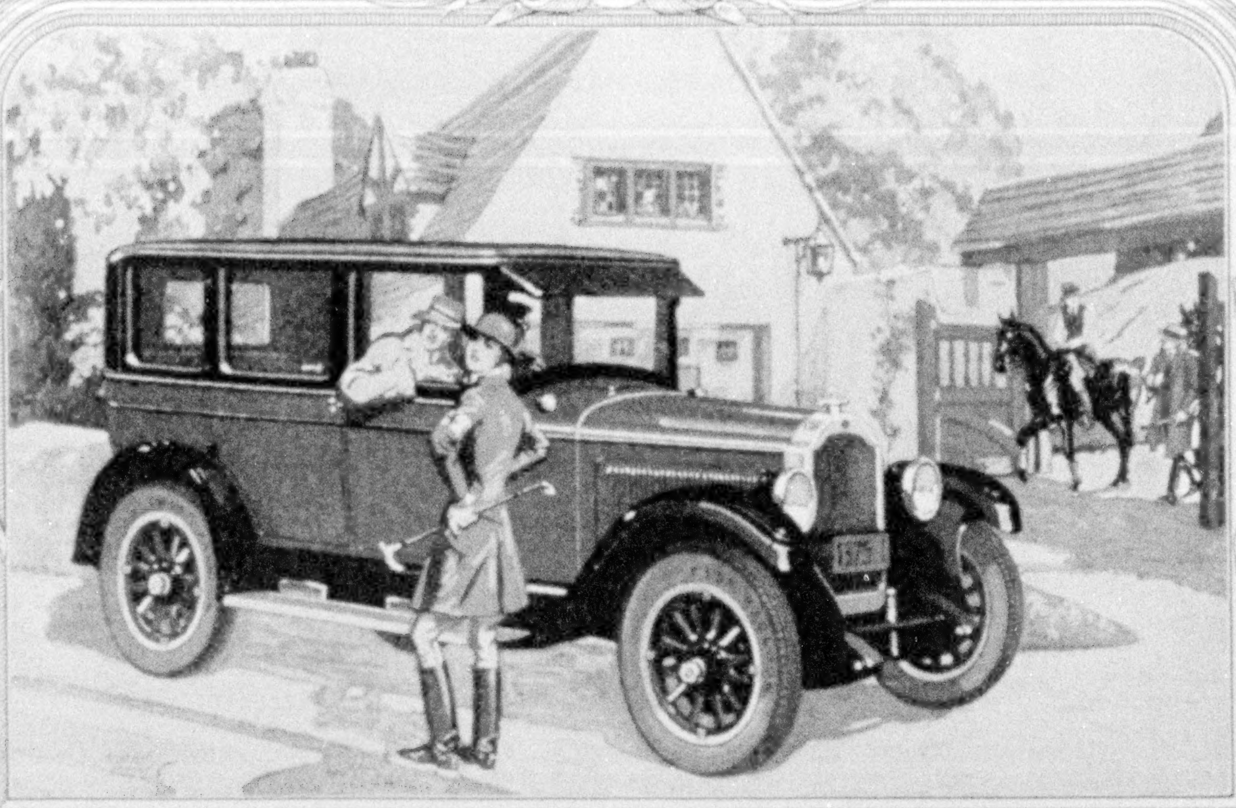
Doctor Howard had to cover as much as forty miles at a time on foot. Could your feet stand this test in the shoes you are wearing? Few men or women will ever have to find out. But everyone can appreciate that shoes which serve the feet so splendidly as the pair of Cantilevers shown above are good shoes to have. Such comfort and durability save your feet—and your pocketbook.

In the Cantilever Shoe your whole foot is free to act with the easy flexibility that Nature intends. This shoe is modeled along the natural lines of the foot and is flexible from toe to heel. This flexibility permits the foot muscles to exercise and regain or maintain the springy strength needed to hold the twenty-six bones of the foot in strong arches. The flexible arch of the Cantilever is "sprung up" to support the arch of the foot without restricting it. (Note how the arch of Doctor Howard's old shoe still curves up.)

Cantilever Shoes are made in attractive pump and oxford models for women. The men's shoes are good looking and dignified. There are also some splendid models for schoolgirls and growing children. If you do not know where to buy Cantilever Shoes, write the Cantilever Corporation, 418 Willoughby Ave., Brooklyn, N. Y., and they will send you the address of a conveniently located Cantilever store and an interesting booklet showing photos of the newest Cantilever styles.

Cantilever Shoe

—supports the arch with flexibility.



Super-efficiency that challenges all cars!

America's liveliest and most astonishing car!... A car whose super-efficiency excels anything that ever was built of its size, or type, or class! ...

No new creation ever presented to the motoring public of this country has so quickly and completely captured the national imagination as the new "70" Willys-Knight Six!

The internationally-famous Knight sleeve-valve engine needs no public endorsement. The unequaled series of world's records it holds for highest sustained speed, continued operation at full load, greatest power development and hill-climbing in high gear are the four basic tests by which efficiency in a motor-car engine is universally measured.

In the Knight type sleeve-valve engine of the new "70" Willys-Knight Six, the principle of high-speed engine construction has been utilized with results that are absolutely astounding ...

With $2\frac{15}{16}$-inch bore and a $4\frac{3}{8}$-inch stroke, the power-plant of this car delivers greater power per cubic inch of piston displacement, throughout its entire range, than any stock American motor-car engine built today!

Ownership of this phenomenal new car is now a perfectly convenient matter. The new WILLYS FINANCE PLAN means a smaller down payment, smaller monthly payments; and the lowest credit-cost in the industry.

Touring $1295, Sedan $1495 F.o.b. Factory. We reserve the right to change prices and specifications without notice.

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The NEW
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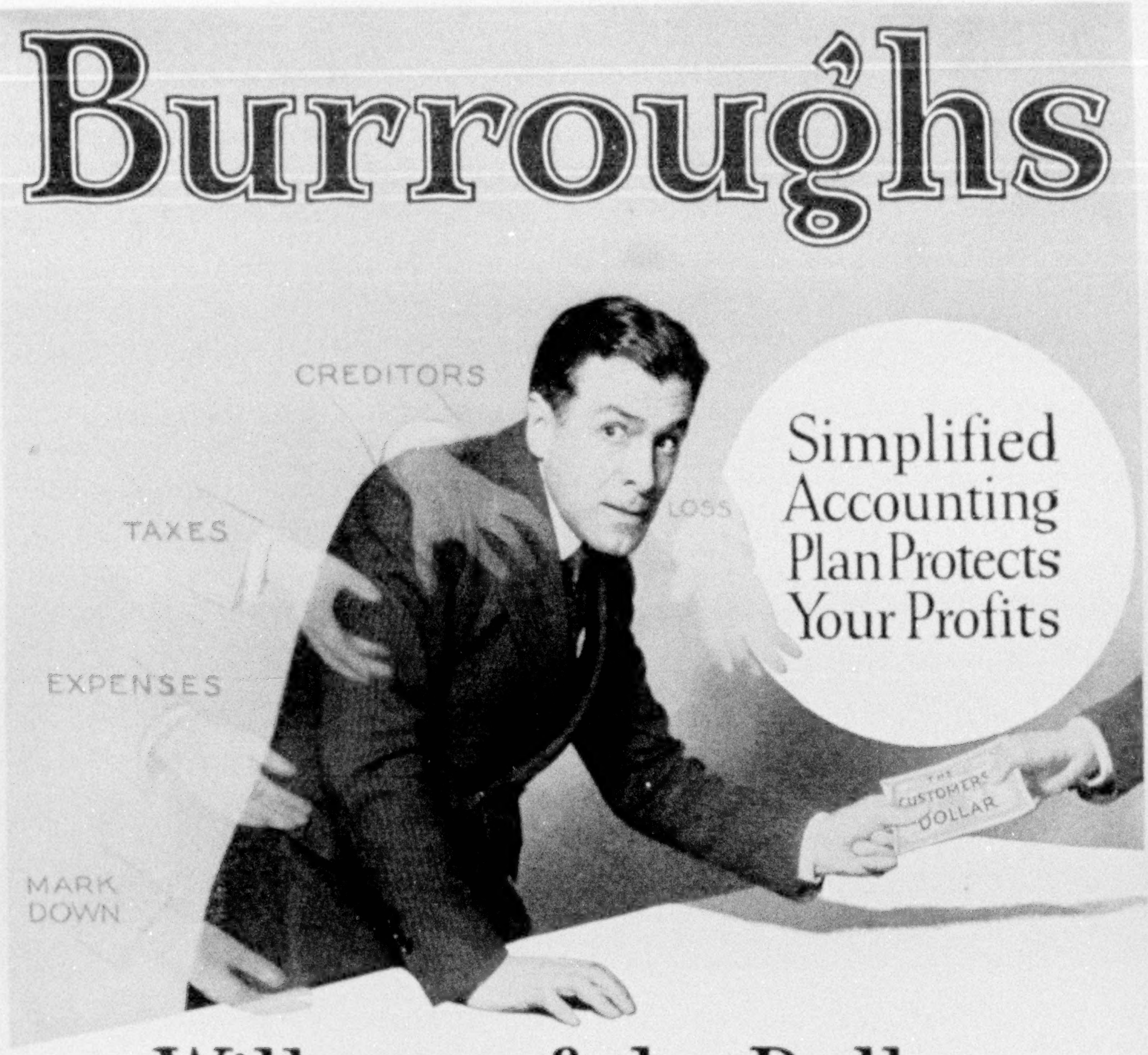
Now — in the Great WILLYS-OVERLAND LINE — *a Car for Every Purse*

Keep a Kodak story of the children

Autographic Kodaks, $5 up

Eastman Kodak Company, Rochester, N.Y., *The Kodak City*



Will *any* of the Dollar be left for you?

More than half of the customer's dollar must go for merchandise.

Most of the remainder must go to pay rent, salaries, taxes, overhead.

Even with the best management only a few pennies of each dollar is the net profit from your business.

But do you know how much of it is rightfully yours, and do you get it?

The Burroughs Simplified Accounting Plan each day gives you all the facts about your business.

It stops leaks—prevents errors—watches expenses—increases profits.

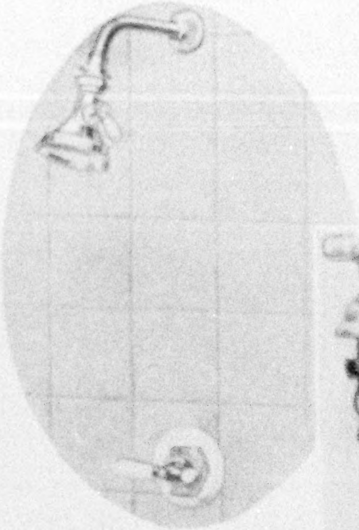
Thousands in your line of business have tried it, proved its ability to increase their profit.

Write today for complete details.

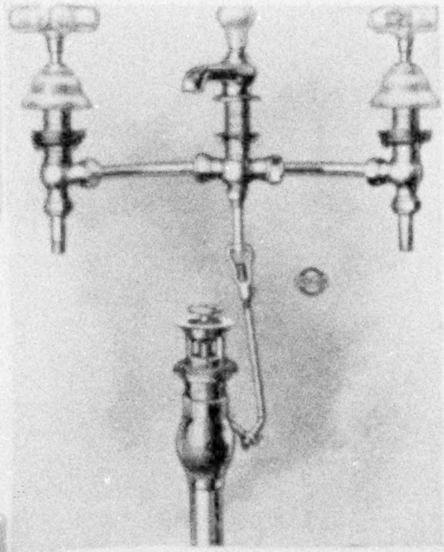
BURROUGHS ADDING MACHINE COMPANY, DETROIT, MICH.

ADDING · BOOKKEEPING · CALCULATING AND BILLING MACHINES

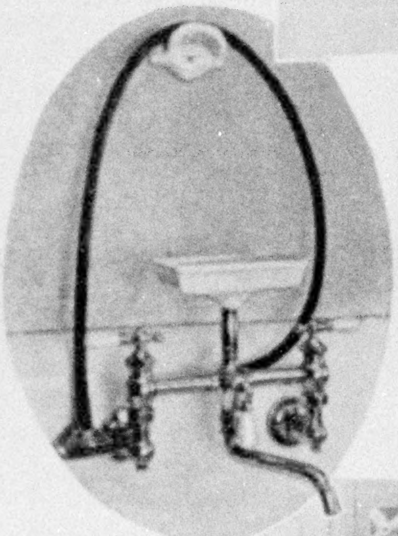
57 Years in the Plumbing Industry



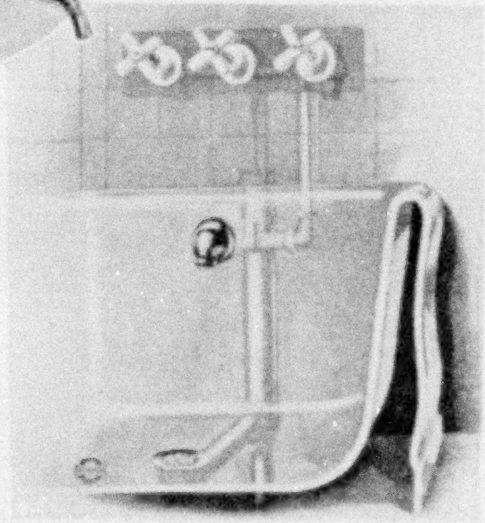
H 9523½ Shower. Very popular for over a built-in tub or stall installation.



H 2276 Lavatory Fixture. Used largely in residences, hotels and clubs.



H 1894 Sink Fixture with one nozzle, hose and spray head. Makes kitchen work much easier and faster.



H 2460 Deshler Bath Fixture. It was our development of this fixture that helped us so much in popularizing the shower.

— half of this time specializing in a complete line of one-outlet fixtures

THE shower, lavatory, bath and sink fixture are examples of plumbing development in which the SPEAKMAN Company by its specialization has materially played a big part. Just how great has been this development of one-nozzle or outlet fixtures is shown by their wide use.

In practically every house, club, hotel and institution being built today, one-nozzle fixtures are being used throughout.

In a booklet which we will send you are shown various types of SPEAKMAN one-outlet fixtures.

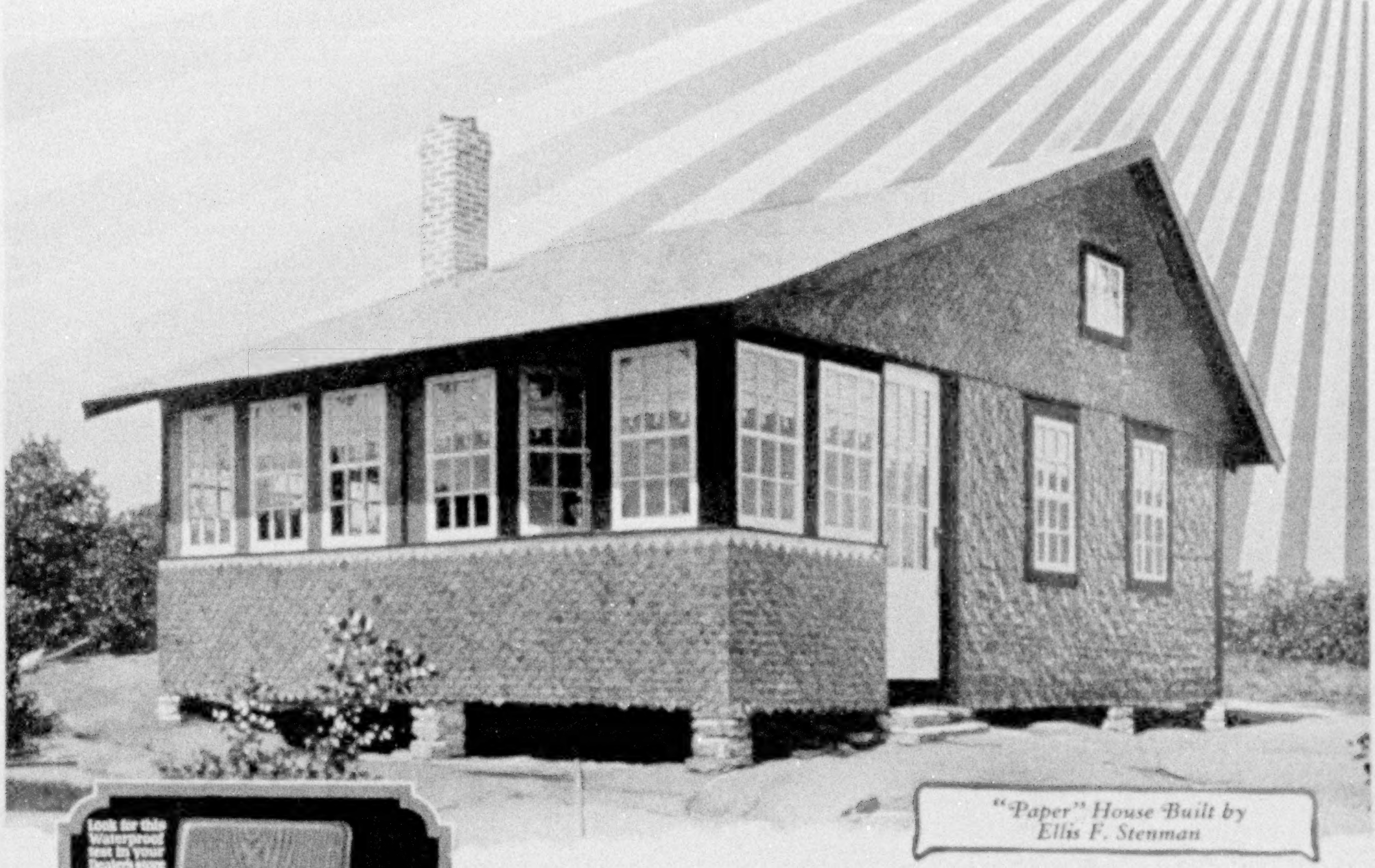
Any SPEAKMAN shower or fixture can be easily obtained. They are sold by nearly 20,000 plumbers throughout the country and distributed by practically every large plumbing jobber.

SPEAKMAN COMPANY
WILMINGTON, DELAWARE

SPEAKMAN SHOWERS *and* FIXTURES

PITTSBURGH *Proof* Products

Glass-Paint-Varnish-Brushes



"Paper" House Built by Ellis F. Stenman

Built This Cottage of Old Newspapers!

JUST old newspapers, glued and pressed together, is the "lumber" of this cottage built at Rockport, Mass., by Ellis F. Stenman. The paper "lumber" was made weather-and-water proof by the use of

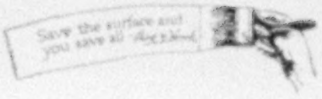
Water-Spar

Water-*Proof* Varnish

and Enamels

Gives your floors, furniture and woodwork a rich, beautiful finish that stands hard wear and cannot be harmed by water. Even scalding water will not turn the finish white! See the submerged finished wood panel in your dealer's window. Comes clear and in brilliant colors.

"Guide to Better Homes" sent free—a valuable book on home furnishing and decoration. Write Dept. C, today.

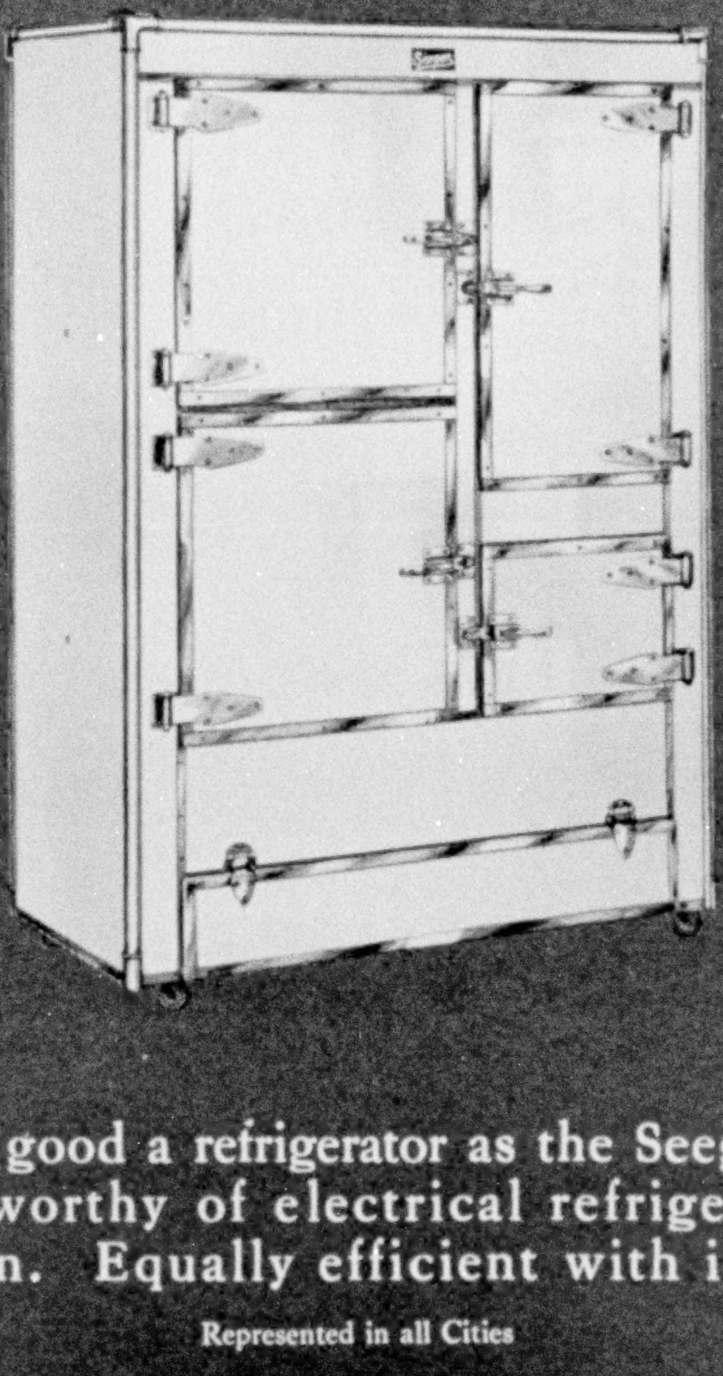


Whatever you need—Glass, Paint, Varnish or Brushes—the Pittsburgh Plate Glass Company has a product that exactly fills your requirements. Sold by quality dealers; used by exacting painters.

PITTSBURGH PLATE GLASS CO.

Paint and Varnish Factories .... Milwaukee, Wis., Newark, N.J., Portland, Ore., Los Angeles, Cal.

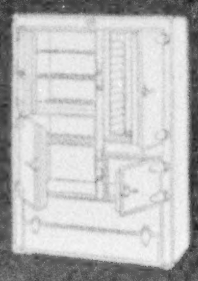
Standard of the American Home



As good a refrigerator as the Seeger is worthy of electrical refrigeration. Equally efficient with ice.

Represented in all Cities

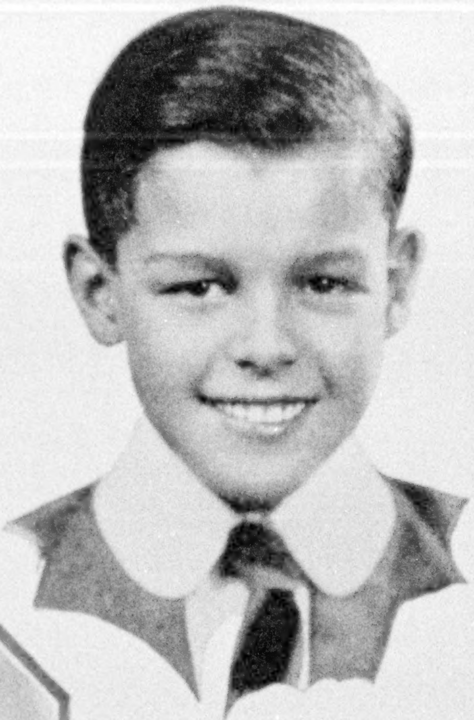
Seeger
ORIGINAL SIPHON
REFRIGERATOR



SEEGER REFRIGERATOR COMPANY

SAINT PAUL—NEW YORK—BOSTON—CHICAGO—LOS ANGELES—ATLANTA

Like Lost Pearls



Teeth clouded with the dingy film that ordinary brushing won't remove

Please accept a full 10-day test of this NEW way that world's dental authorities advise for lightening clouded teeth and protecting the gums

FREE
10-Day Tube
Mail the coupon

UNKNOWN to yourself, you are probably hiding the gleam and clearness of your teeth beneath a dingy film coat—but that now you can easily remove. A coating, though, that ordinary washing won't combat successfully.

In a few days you can make a great difference in the color of your teeth. Can literally change your whole appearance. Can restore "off-color" teeth to gleaming beauty. Can firm your gums and give them healthy color.

Largely on dental advice the world has turned to this new way. A full 10-day tube will be sent you upon receipt of the coupon below.

Hidden by film

Dental science now traces scores of tooth and gum troubles to a germ-laden film that forms on your teeth. Run your tongue across your teeth. You will feel it, a slippery, viscous coating.

That film absorbs discolorations from food, smoking, etc. And that is why your teeth look "off color" and dingy. It clings to teeth, gets into crevices and stays. It lays your gums open to bacterial attack and your teeth open to decay. Germs by the millions breed in it. And they, with tartar, are a chief cause of pyorrhea.

FILM the worst enemy to teeth
You can feel it with your tongue

Mere brushing won't do

Ordinary dentifrices and cleansing won't fight film successfully. Feel for it now with your tongue. Note how your present cleansing method is failing in its duty.

Now *new* methods are being used. A dentifrice called Pepsodent—different in formula, action and effect from any other known.

It removes that film—And Firms the Gums

It accomplishes two important things at once: Removes that film, then firms the gums. No harsh grit, judged dangerous to enamel.

A few days' use will prove its power beyond all doubt. Send the coupon. Clip it now before you forget.

Canadian Office and Laboratories: 191 George St., Toronto, Ont.

FREE
Mail this for 10-Day Tube to

Pepsodent REG. U.S. PAT. OFF.
The New-Day Quality Dentifrice
Endorsed by World's Dental Authorities

THE PEPSODENT COMPANY,
Dept. 339, 1104 S. Wabash Ave., Chicago, Ill., U. S. A.

Name ....

Address ....

Only one tube to a family 2139

The Happy Little Songbirds

and how to win them

Many now know the joy of having these sweet little wild birdies sit on their hands, pick tidbits from their fingers and fly around in perfect confidence of protection for themselves and their offspring.

It is surprising how susceptible they are to acts of love. Rightly designed houses and some specially prepared foods will quickly gain the friendship of these interesting little workers that rid your cherished trees, shrubs, flowers and premises of injurious moths, beetles, mites, mosquitoes and other insect pests.

Why Dodson Houses Win the Birds

Mr. Dodson has for many years devoted his entire time to lecturing, visiting beautiful estates in the study of wild birds all over America. Many seemingly insignificant details have been discovered and patented by him that are vital in the luring of songbirds to man-made houses. Mr. Dodson is always willing to talk before clubs or associations interested in creating bird sanctuaries, either private or municipal.

Dodson's Scientific Wren House

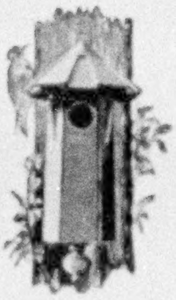
as shown above. The Silver-throated Wren is one of our sweetest singers. A four-compartment house satisfies their habit of changing nests for each of their three broods. Beautiful design, made of oak, finished in green, with cypress shingles, copper coping, comes complete with rust-proof snap on hanger. Size, 28 in. high by 18 in. in diameter. **Price, $7.00.**

QUEEN ANNE MARTIN HOUSE

48 rooms for the beautiful Martins, who colonize. Scientific porch, pure white, green trim. Cypress, copper roof, including 22-foot easy raising pole. House, 36x26x37 inches. **Price, $60.00. Others as low as $18.00.**

Bluebird House

The happiest and most beloved songsters. Our scientific houses satisfy these most exacting birds. Made of oak, finished in green. Size, 21 in. high by 16 in. in diameter, with 18-ft. easy raising pole. Price, **$14.00.**



FLICKER HOUSE

Lures the Flickers. They keep your trees free of destroying moths, ants and other tree pests. 26½ in. high by 12 in., only **$7.00.**

BIRD BATH

This handsome stoneware bath is an ornament for any garden, being very graceful and substantial. The birds bathe freely in it, as they do not fear the cats. Complete with 32-in. stand, only **$26.00**

Write for our big catalog of art stoneware furniture.

Automatic Feeding Shelter, stocked with a few simple foods they crave and DODSON'S Suet Cake and Grain Mixture, lures songsters from the whole neighborhood. Automatically revolves to protect birds from storms. Cypress, finished in green. Size, 24x22x12 in., including 8-foot pole, **$8.50;** with copper roof, **$11.00.** Dodson's Suet Cake, 40c a pound; Grain Mixtures, 19c a pound.

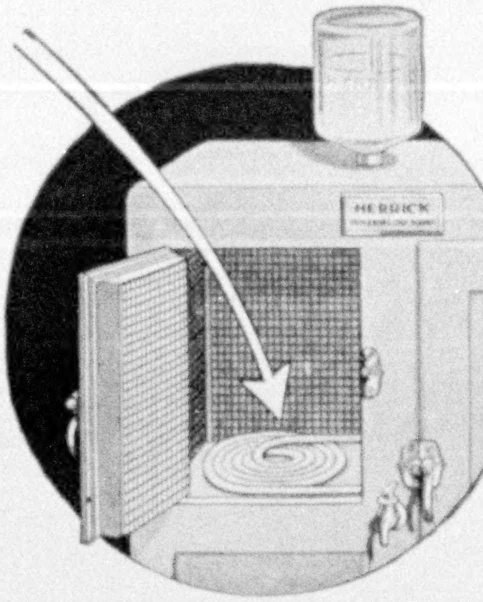
Free

My fascinating book, "Your Bird Friends and How to Win Them," sent to anyone who loves our beautiful songbirds. It is full of things you should know. Based on 40 years' study of this most interesting subject.

Order direct from this ad. DODSON Scientifically Designed Houses can only be bought from

Ask about Dodson's Guaranteed Sparrow Trap.

JOSEPH H. DODSON, Inc.
President of the American Audubon Association
740 Harrison Avenue Kankakee, Ill.



Ice Water
without Ice Waste

Ice-cold water, untouched by ice, at the turn of a faucet! The HERRICK Water Cooler, available with every HERRICK, keeps water pure and conserves ice. Fits regular water system, or may be used with bottle for spring or well water.

"Pays for Itself in Three Years"

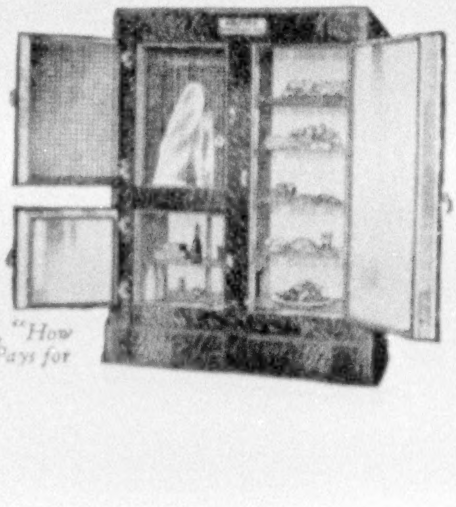
say Herrick Dealers. 53% of the HERRICK Dealers answering a recent questionnaire said the most frequent comment of HERRICK owners was about its *low* cost of operation.

Mineral wool insulation in the HERRICK resists penetration of warm air and retains cold air. Solid oak case is weatherproof and wear-resisting. Constant cold, dry-air circulation prevents odors, taint or decay. And all combine to reduce ice or electric bills.

HERRICK REFRIGERATOR COMPANY
206 River Street, Waterloo, Iowa

Food keeps BEST *in the*
HERRICK
THE ARISTOCRAT OF REFRIGERATORS

For Ice or Mechanical Refrigeration



Send for Free Booklet, "How the Herrick Pays for Itself"

GRUEN

You will see this emblem only on jewelry stores of character

Jealously the old guild masters guarded the reputation of their craft

BEFORE the shop of the seventeenth-century watchmaker there stood a little apprentice boy. He cried his master's wares and enticed customers.

But sometimes he would run into the shop announcing excitedly, "*Messieurs les Gardes Visiteurs! Messieurs les Gardes Visiteurs!*"

And the master would hastily bethink himself of every watch he had, trembling if he remembered one that was not quite what it should be.

There was no longer time to hide it. The *Gardes Visiteurs*, or visiting inspectors of the guild, made their descents without warning. Faulty goods were seized, the makers quickly brought to trial before the guild council.

The highest standard these modern guildsmen apply to any watch is that represented by the mark Gruen *Precision*.

Gruen *Precision* Watches are made in a separate workshop of the Gruen, specially constructed to produce movements of the *Precision* grade exclusively.

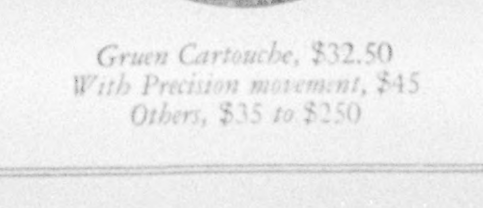
Here are assembled the Guild's most advanced equipment and its most skillful craftsmen, men wholly devoted to the task of making the best watches they are capable of.

No effort is too great, no period of patient toil too long. Not until the watch is regarded wholly satisfactory, after rigid scrutiny by the masters of the craft, is it worthy to bear the mark *Precision*. For this mark has become the pledge of the modern guild of watchmakers.

The standards of the guild were inflexible. The Worthy Company of Watchmakers was determined to protect its reputation. Its mark on a watch must continue everywhere to serve as a definite pledge of finest craftsmanship.

In the modern Gruen Watch Makers Guild, careful inspection plays the same important part. And modern methods, combined with the guild spirit, have made possible standards of excellence that the old guild masters never dreamed of.

A NEW GRUEN CREATION



Gruen Cartouche, $32.50
With Precision movement, $45
Others, $35 to $250

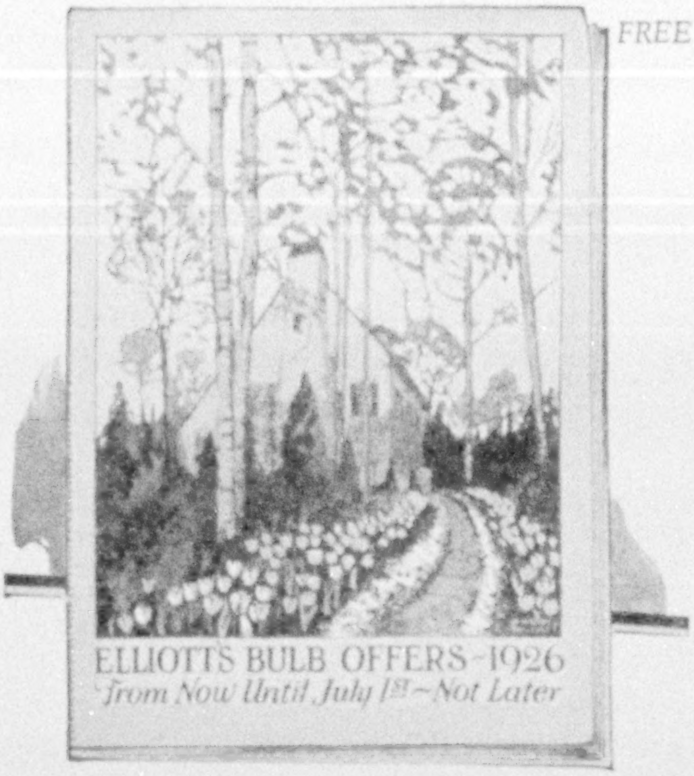
Yet it costs but little more, in any given quality of case, to secure a watch marked Gruen *Precision*. The better jewelers can show you the Gruen Watch pictured here, as well as many others in great variety of styles, in both *Precision* and ordinary grades.

GRUEN WATCH MAKERS GUILD
Time Hill, Cincinnati
U. S. A.

Canadian Branch, Toronto

Engaged in the art of fine watchmaking for more than half a century

GRUEN GUILD WATCHES



Order Early!

ELLIOTT

Giant Tulips

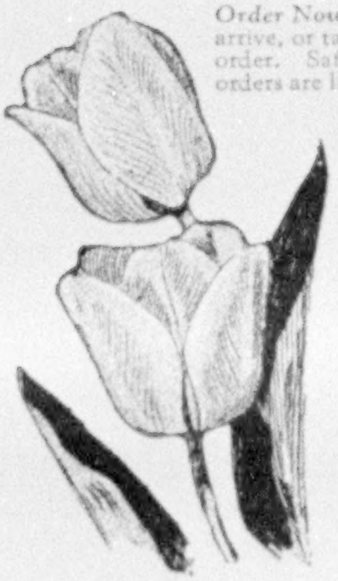
Joy will burst out from your garden and command the mood of every passer-by if you plant Elliott's wonderful tulips. Truly regal kinds, big bulbs, the very choicest produced for 1926, sure to live, sure to make vigorous growth, true to type, gloriously beautiful. The name of Elliott's has been a guarantee of the best for forty years.

SPECIAL OFFER *till July 1st*

To be planted in the fall. Bloom in May. Stems over two feet tall. Flowers often 3½ inches in diameter. Ten varieties, superb in size, form and color.

Baronne de la Tonnaye. Vivid pink.
Bronze Queen. Buff and golden bronze.
Clara Butt. Delicate salmon-pink.
Dream. Lovely delicate lilac.
Euterpe. Mauve-lavender. Extra fine.
Farncombe Sanders. Fiery scarlet.
Pride of Haarlem. Deep old rose.
Faust. Velvety maroon-purple.
Glow. Deep glowing vermilion.
Madame Krelage. Pink, light-bordered.

Collection A—100 Bulbs, 10 each kind	$4.95
Collection B—250 Bulbs, 25 each kind	12.00
Collection C—1000 Bulbs, 100 each kind . . .	45.75

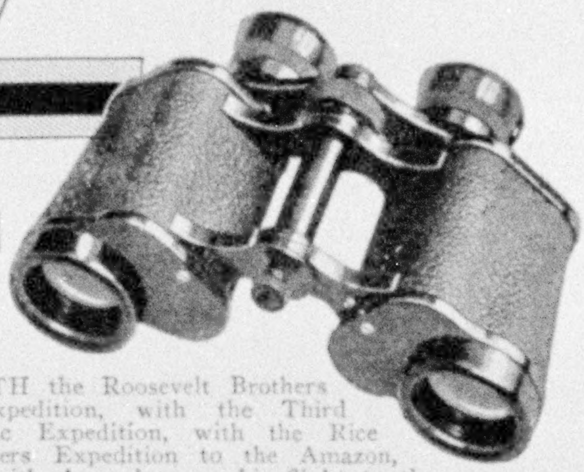


Order Now. Pay in the fall when bulbs arrive, or take 5% discount for cash with order. Safe arrival guaranteed. Late orders are liable to disappointment.

FREE!—Elliott's Book of Bulbs for 1926. Very helpful. Hundreds of practical suggestions for growing Tulips, Hyacinths, Daffodils, Lillies, and other bulbs, indoors or out. Profuse illustrations—many in natural colors. Send for it today. Place bulb orders early.

ELLIOTT NURSERY COMPANY
Established 1889
625 Magee Building
Pittsburgh, Pa.

ZEISS
Prism Binoculars



WITH the Roosevelt Brothers Expedition, with the Third Asiatic Expedition, with the Rice Brothers Expedition to the Amazon, and with Amundsen on his flight to the Pole—wherever the utmost is demanded, you will find Zeiss Binoculars.

Voyaging, touring, and at sporting events, make a Zeiss Binocular your constant companion. At opticians', camera- and sporting-goods stores. Write us for catalog.

CARL ZEISS, INC., 153-D West 23d St., New York
Gen'l Dist. Agts. for Canada: The Hughes Owens Co., Ltd., Montreal.

HARRISON MEMORIALS

The keynote of Harrison memorials is individuality in design with expert knowledge of construction.

Eighty years of enviable achievement assure you understanding service.

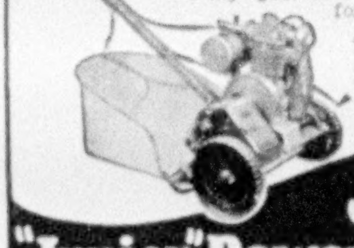
Creators of Public and Private Memorials.

Booklet "C" mailed upon request.

HARRISON GRANITE COMPANY, INC.
Established 1845
4 East 43rd Street, at Fifth Avenue New York, N. Y.
Offices: Detroit Chicago Pittsburgh Minneapolis
Works: Barre, Vermont

Quality in a small Power Mower

A worthy member of the famous Jacobsen line, which includes a power mower for every type of lawn. The "Junior" mower cuts a 19-inch swath at the rate of two acres a day on a gallon of gas. Suitable for moderately large lawns. Efficient on terraces—steers easier than a hand mower. Has self-sharpening device. Fully guaranteed—attractively priced. Write for literature today.



Jacobsen Mfg. Co.
Dept. RR Racine, Wisconsin
Eastern Office, 245 W. 55th St.
New York City

Jacobsen
"Junior" Power Lawn Mower

THE CURTIS INSTITUTE OF MUSIC

PERMANENTLY ENDOWED BY MARY LOUISE CURTIS BOK

WHERE THE ENDOWMENT MAKES POSSIBLE
A MODERATE FEE
FOR PERSONAL STUDY
WITH ARTISTS OF SUPREME DISTINCTION

RITTENHOUSE SQUARE
PHILADELPHIA

DE LUXE ALL PORCELAIN

AUTOMATIC REFRIGERATORS

Pure, Sweet Milk KEPT Pure and Sweet

Milk—your babies' most healthful food—deliciously chilled and sweet in the icy chambers of the Automatic. Drafts of clean, cold air wash constantly through the food chambers—a dainty, wholesome atmosphere. Eggs keep strictly fresh, butter stays hard and firm, in the Automatic.

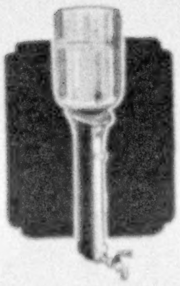
Here's a beautiful refrigerator—planned for convenience and cleanliness. The De Luxe Automatic has an all-porcelain exterior and a one-piece porcelain lining with rounded corners. No seams or crevices. Plenty of room for everything in the oversize food chambers. No crowding, no jumble of plates and dishes in the Automatic.

You won't need the iceman so often when you own an Automatic. 16 distinct walls of insulation save your ice and cut your ice bills. Golden ash or Super-Steel casings if desired. All models perfectly adaptable to electric refrigeration.

Write for your dealer's name. Just send us your address. We want you to have our new folder describing the latest Automatic Refrigerators.

ILLINOIS REFRIGERATOR COMPANY
Dept. 15-M, Morrison, Ill.

Pure, Chilled Drinking Water —always ready



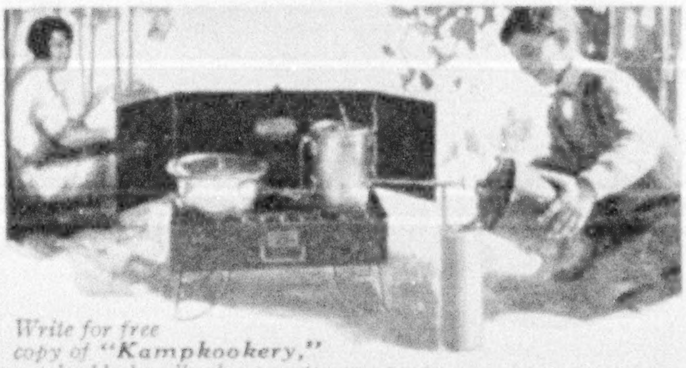
Convenient and Sanitary. Ice does double duty

ALSO CHILL YOUR DRINKING WATER

De Luxe All Porcelain

AUTOMATIC

saves food · chills water



Write for free copy of "Kampkookery," a valuable handbook on motor camping. Address nearest office, Dept. 62.

Kampkook—The Safest Camp Fire!

INDOORS or out, in camp or when you stop to cook along the way—there is no fire danger when you *Kampkook*. A child can operate this safety camp stove even to the filling. The detachable, easy-fill tank is not only a great convenience, but it's safe—can't be filled while stove is burning. *Kampkook* is handy to carry, easy to operate, and the fire is always under control.

Kampkook is the original folding camp stove, built to meet the exacting demands of folks who know the joy of good eats when they camp. It has a host of friends because it has so many good features only *Kampkook* can give them. Be sure your stove is the genuine American *Kampkook*; it's easily identified by the name plate. Name of nearest dealer on request if yours cannot supply you.

AMERICAN GAS MACHINE COMPANY, Inc.
Factory: Albert Lea, Minn.
Eastern Office: 78 Reade St., New York City

AMERICAN KAMPKOOK
AMERICA'S MOST POPULAR CAMP STOVE

Come to

Wilmington North Carolina

"Playground of the South"

Plan now to include Wilmington and its four Beaches in your vacation this year. Season opens June first. Every sport, in finest climate, offered here. Temperature in summer, 78°. Ask for illustrated descriptive booklet. Desk 9.

CHAMBER OF COMMERCE
Wilmington - - North Carolina

South America

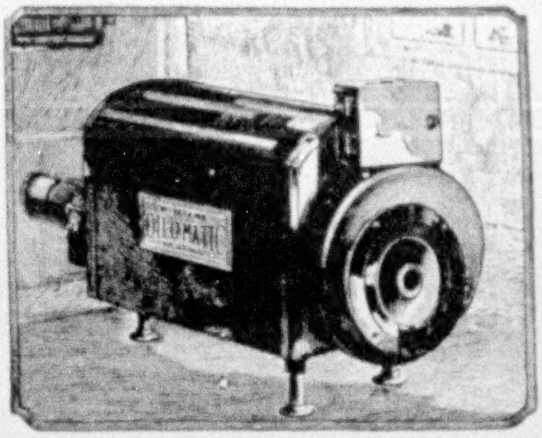
Get out of the travel rut! Below the Equator are new alluring lands. Gay Rio de Janeiro—wonderful Buenos Aires—beautiful Montevideo. A round trip to Brazil, including a week at Rio and its famous beach and mountain resorts, takes only a month. Ideal climatic conditions.

Fortnightly Sailings — *21,000-ton steamers*

American Legion — Pan America
Southern Cross — Western World

Let Us Plan Your Trip

MUNSON STEAMSHIP LINES
67 Wall Street — New York City



Every modern convenience *except one*— OIL HEAT

Why deceive yourself about firing the furnace? Why not admit frankly that it is the most galling and thankless task in your home—and *then do something about it!*

You wouldn't fire a neighbor's furnace for pay. Nor take out his ashes. You wouldn't get up at dawn to shake the grates for your best friend. Money couldn't tempt you to split kindling to build a fire.

Yet you are actually paying for the "privilege" of doing it yourself in your own home. How dearly, you will never know until you have Oil-O-Matic heat.

How much is it worth to have every room just the temperature you enjoy? Any hour—any day—any time! Without your raising a hand.

To be free to go and come as you wish without thought of the heating plant? To have your furnishings remain fresh and clean? To enjoy better health from even, dependable heat?

Oil-O-Matic gives you these comforts, usually at no extra cost. And frequently for less money than you are now spending.

Let your local oilomatician examine your heating plant and give you an estimate of the complete cost of a guaranteed installation. Meanwhile send the coupon below for "Heating Homes With Oil" that tells the whole story.

WILLIAMS
OIL-O-MATIC
HEATING

World's Largest Producer of Automatic Oil Burners

Williams Oil-O-Matic Heating Corp.
Bloomington, Illinois N.G.-56

Without obligation, please send me "Heating Homes With Oil," by return mail.

Name..

Street..

City.............................. *State*............

YOU Can Have a Beautifully Clean Home

YOUR thought when you first use a Royal will be, "Why didn't I have it long ago."

Royal cleans so swiftly, easily, thoroly. Merely guide it over your rugs, and they are clean through and through. All surface and embedded dirt—together with the millions of dangerous disease germs which lurk in every rug, are instantly whisked away.

Royal's ease of operation, speed, and thoroness mean that you will use it to do *all* your cleaning. With its attachments there's practically nothing about the house that you can't clean—hangings, bedding, furs, clothing, closed car interiors. And for countless other cleaning purposes, Royal continually saves you time and money.

A trial of the Royal in your own home is convincing proof that it offers the greatest value and is the best cleaner you can buy. There's a dealer near you who will gladly lend you one to try. If you don't know his name, write us.

The P. A. Geier Company, Cleveland, Ohio

BOSTON NEW YORK CHICAGO

Manufactured in Canada for Canadians by Continental Electric Co., Ltd., Toronto

Also Manufacturers of Royal Vibrator, Royal Dryer, Royal Washer

ROYAL
ELECTRIC CLEANER
Gets ALL the dirt by Air Alone

A 36 Day Personally Conducted Tour

to Europe

All Expenses

$365

with the ART CRAFTS GUILD
Collegiate Tours

SEE England, Holland, Belgium and France with a congenial party of college students, instructors, alumni and friends who will tour Europe this summer. Weekly sailings from Montreal on Canadian Pacific steamships. Plenty of deck space for dancing, games, rest and recreation. An American college dance band with each party.

Two-day voyage down the beautiful St. Lawrence. Only four days open sea. Visit Liverpool, Chester, Leamington, English castles, Shakespeare country and Oxford. Four days in London. See the Hague, Amsterdam, Brussels, Bruges, Ostend. Five days in Paris. Visit Versailles and the battle areas. Ample time for individual sight-seeing and shopping.

Shorter tours if desired, at $260 and $330. Tour price includes hotels, meals, traveling expenses, fees and guides. Management arranges all details; books transportation and hotel accommodations; personally conducts party. Write for complete, detailed itinerary.

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via **Canadian Pacific**
"World's Greatest Travel System"

Art Crafts Guild Travel Bureau, Dept. 111, 500 North Dearborn Street, Chicago, Ill.
Gentlemen: Please send me, without obligation on my part, full details of your Collegiate Tours to Europe.

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Address ....

City .... State ....

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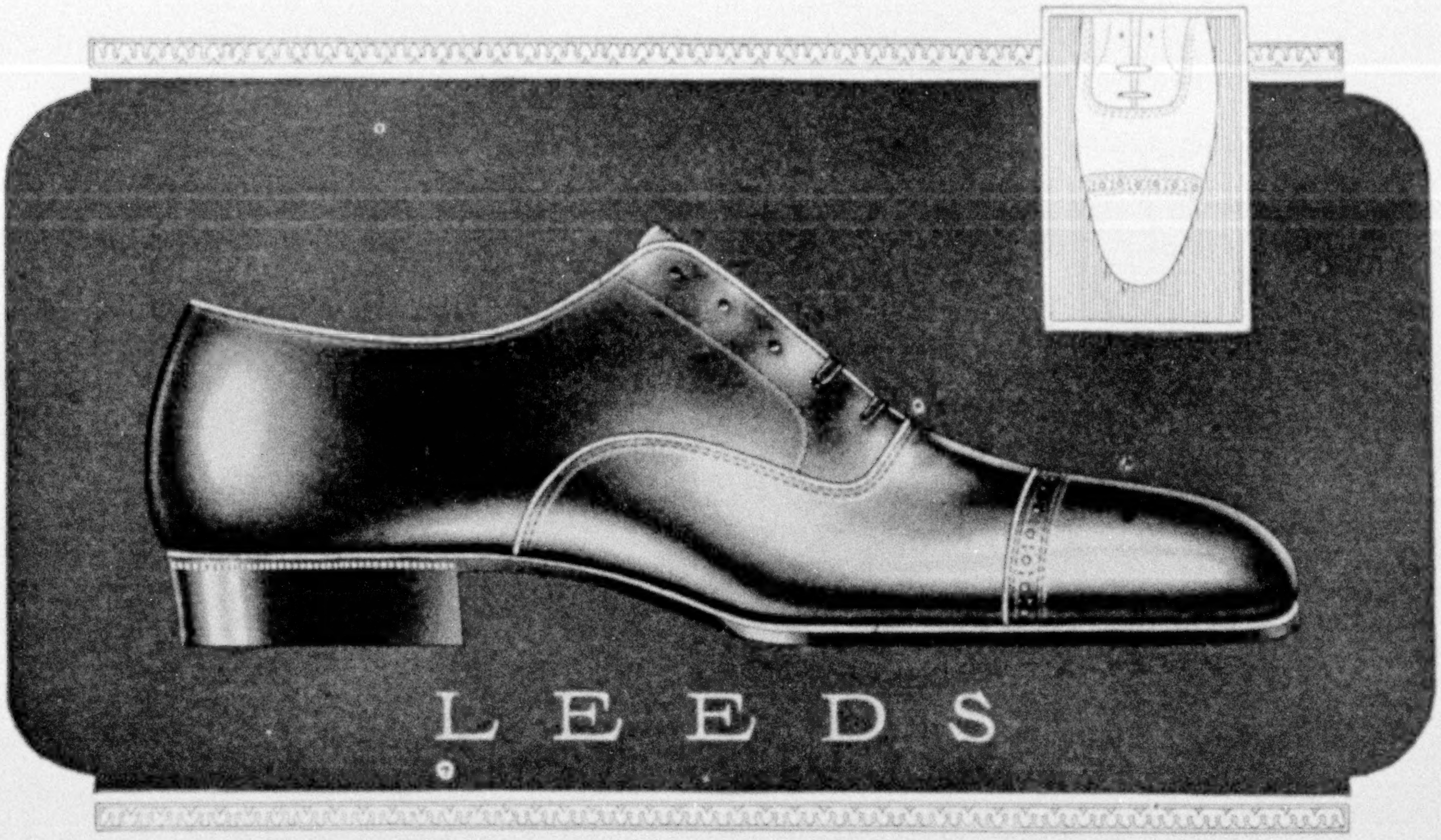

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What a difference it makes in summer comfort to have light-weight shoes! And how the man who cares about his appearance will appreciate a shoe such as this which is a fitting touch to the season's clothes. ~ It takes good material to make a worthy light-weight shoe that will carry its owner gracefully and keep its good looks. ~ And only a Banister Shoe would have just this aristocracy of style combined with value and practical comfort. ~ There is something even in the portrait of this shoe that tells you that no man young in his craft could have made it. Banister Shoes have been made for eighty-one years and through all this time have been worn by men who appreciated the best in all things.

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THE 4½ pound motion picture camera that makes this magic possible is called *Filmo*. It has been perfected for your personal use by the firm which supplies 95% of the cameras and equipment used in professional motion picture studios the world over. *Filmo* costs but $180. Yet it adapts the precision of our $5,000 professional cameras to the use of any amateur who can take an ordinary snapshot.

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Thirty Years Building the Best

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A porcelain exterior refrigerator retains its original lustrous color, and is easy to keep immaculate.

Today BOHN porcelain exterior refrigerators (either white or gray) can be bought for little more than the old fashioned wooden box.

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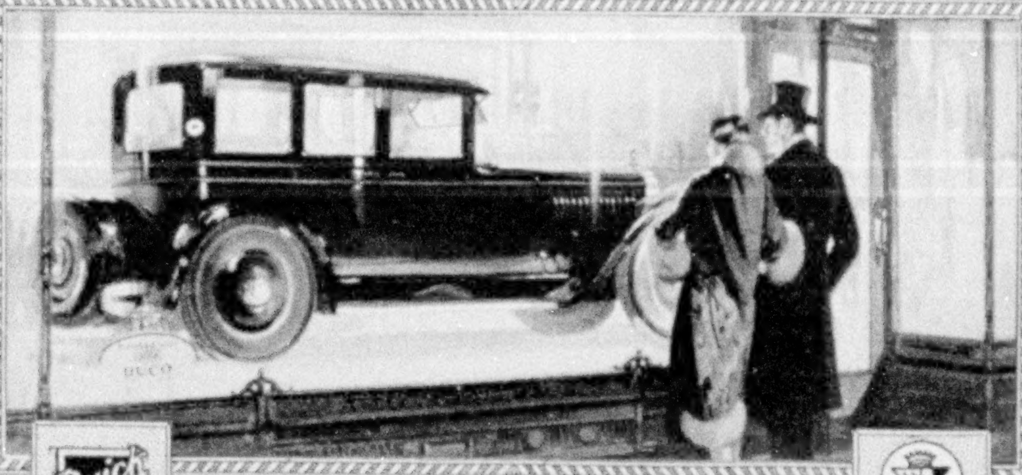

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THE gleaming finish on the car beckons to you from the show-room window. It speaks to you of good taste and beauty and pride of ownership.

Unconsciously you think, "That must be Duco". For a Duco finish is richly lustrous, invitingly beautiful. But, more than that, it is your assurance that you need not say, a year or two later: "It doesn't look like much—but listen to that engine purr!"

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By EDWARD MATHIEU, *Chef de Cuisine*
Davenport Hotel, Spokane

Have trout fresh and well cleaned. Put in buttered gratin dish, add salt, pepper, fresh butter, lemon slice, fresh mushrooms and chopped shallots.

Cover with chicken or beef broth; boil on top of range and finish cooking in the oven for twenty-five minutes.

Take liquid out of pan and make sauce as follows: Flour, yolks of egg, chopped chives (or parsley) mixed well with a fork. Add slowly to fish broth to boiling point until the right creamy thickness. Stir well but don't allow to boil. Pour over the trout and serve immediately, finishing the sauce with a good size piece of fresh butter.

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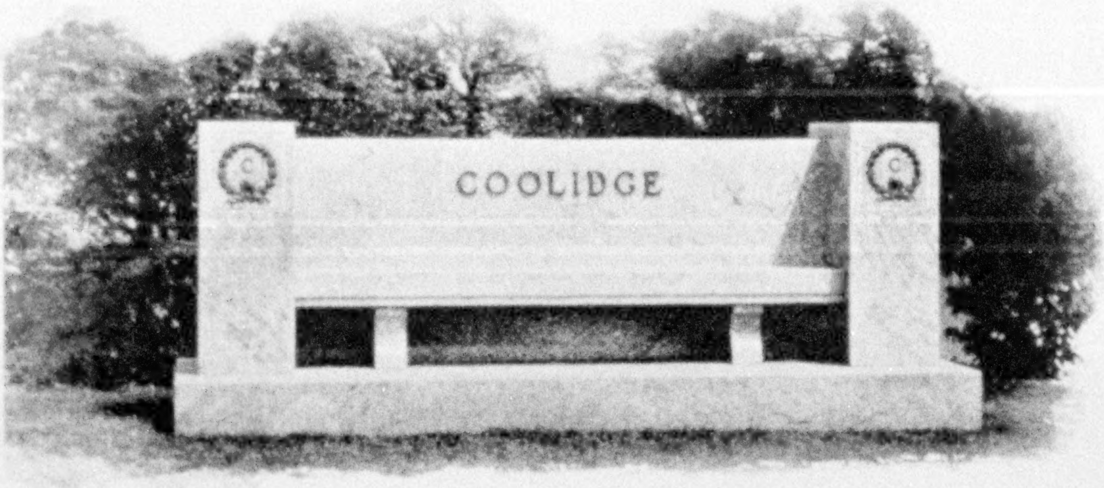

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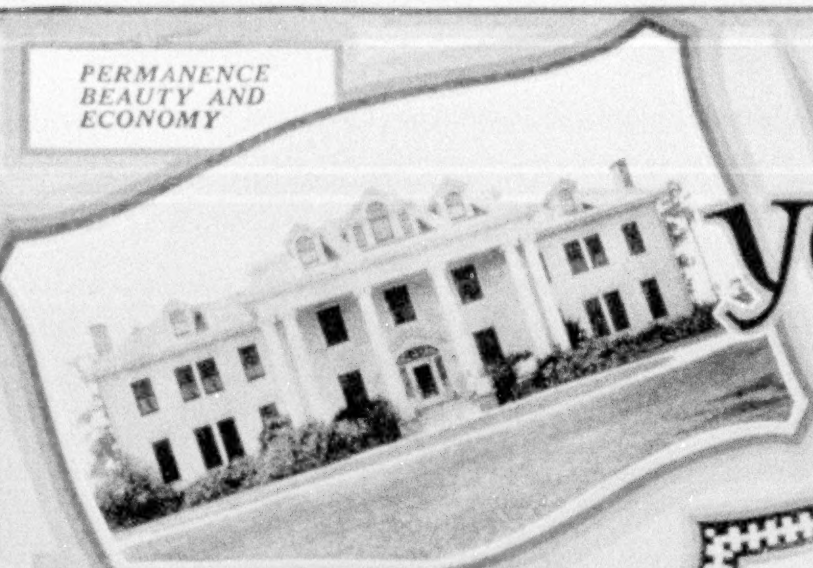

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Tide Water Red Cypress

"The Wood Eternal"

construction gives *generations of service* as shown by authentic record of building experience down through the centuries.

Used for foundation timbers, sills, siding, porches and all exterior woodwork, Tidewater Red Cypress successfully resists decay influences by virtue of the natural preservative grown into the wood, *averts costly repairs* and *stops early depreciation* at the source—*practical economy.*

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Whether you are planning a mansion, a cottage, a bungalow or just a garden fence, it will pay you to get all the facts about this versatile wood and build right in the first place. Also, ask about Tupelo, the long-wear economical flooring.

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Tidewater Red Cypress

This "homey" 7-room Dutch Colonial Cottage is Tidewater RED Cypress, within and without—durability insurance.—Mr. Elmo C. Lowe, Architect.

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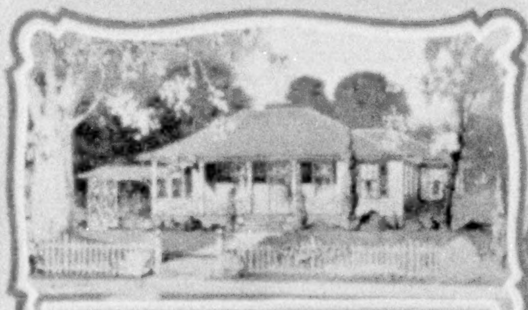

A cozy Southern Bungalow, 5 rooms. Built entirely of Tidewater Red Cypress for enduring beauty and lasting economy.—Mr. F. D. Parham, Architect

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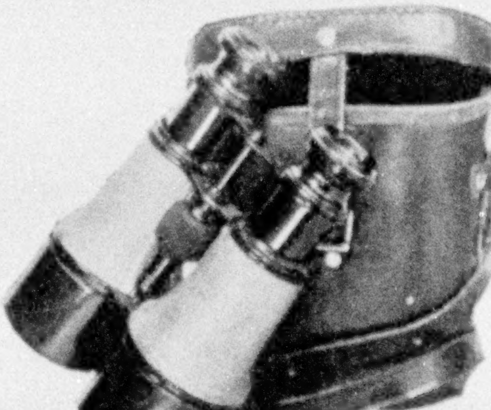

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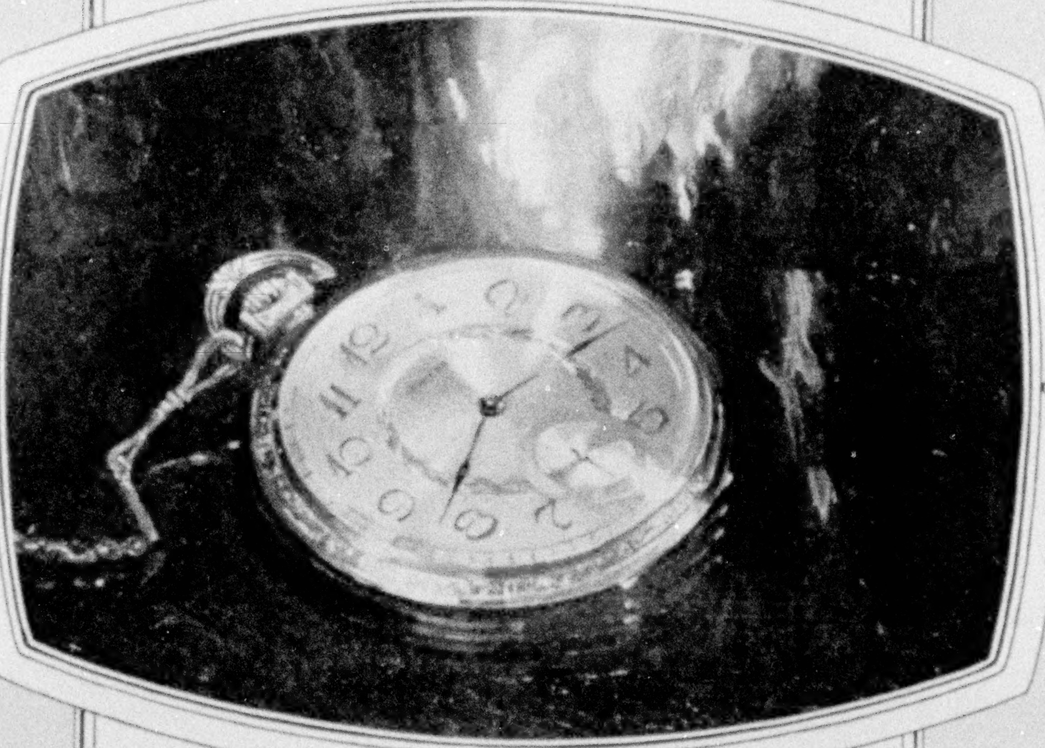

The name Howard on the dial of a watch shows that an investment has been made sufficient to secure the finest and most precise pocket time-piece that can be had There is no such thing as a low priced Howard Watch

THE KEYSTONE WATCH CASE CO
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The HOWARD Watch

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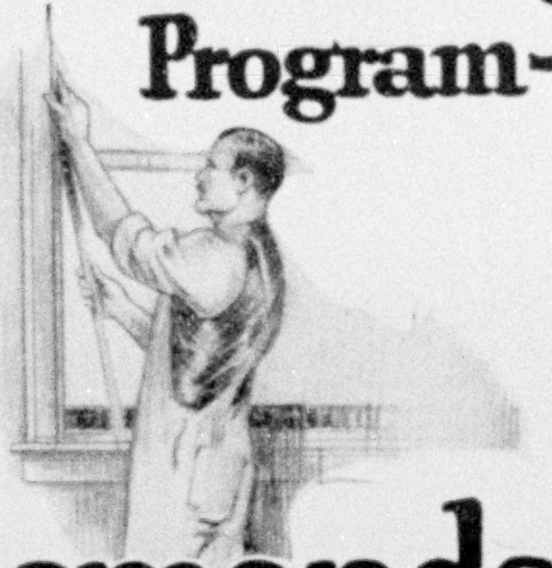

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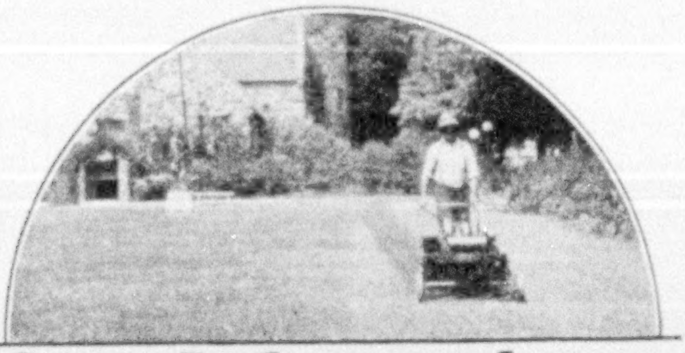

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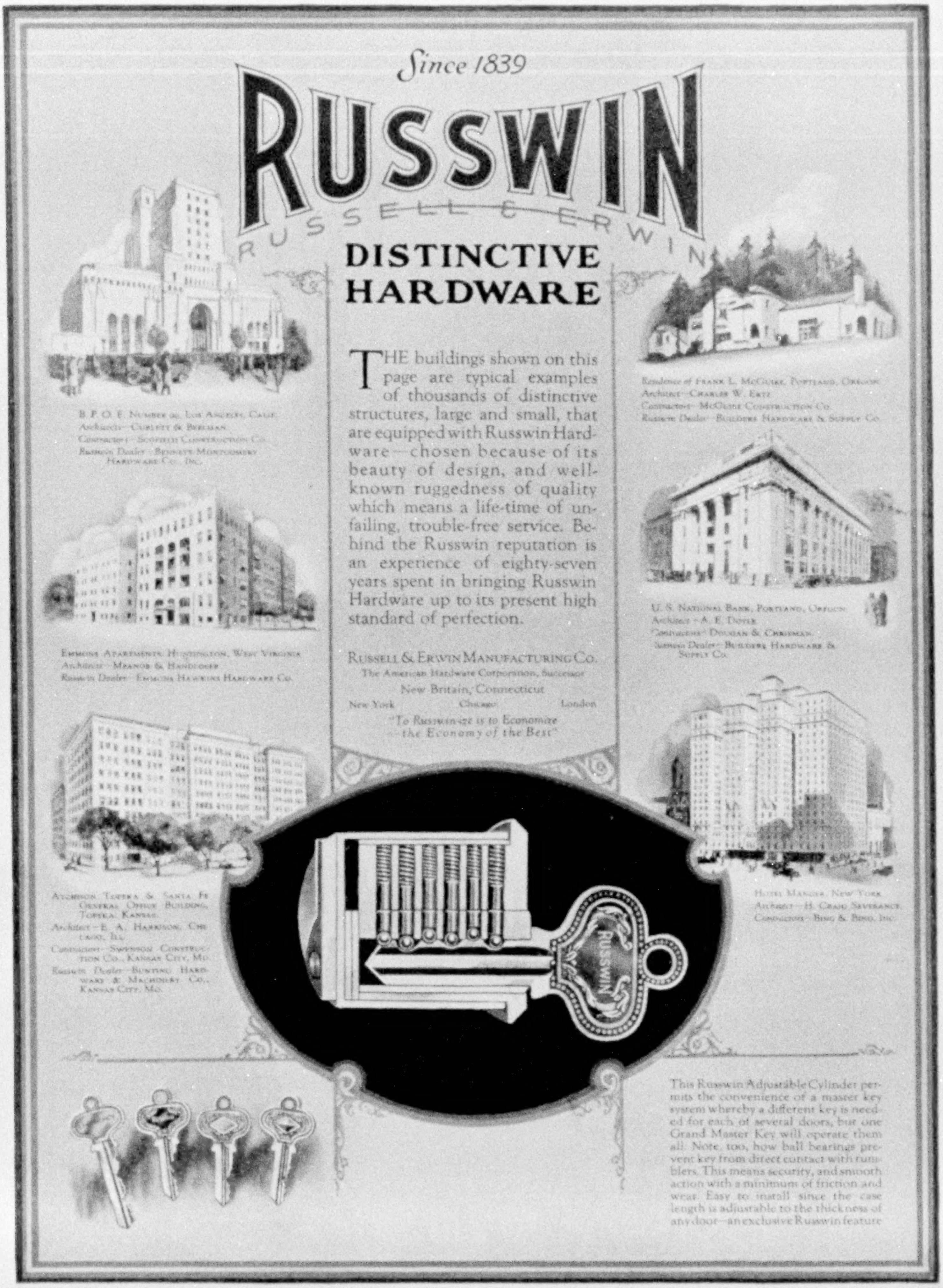
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Made as harmless as a substitute

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Mail This Today for 10-cup Sample; 10 cts.

KAFFEE HAG

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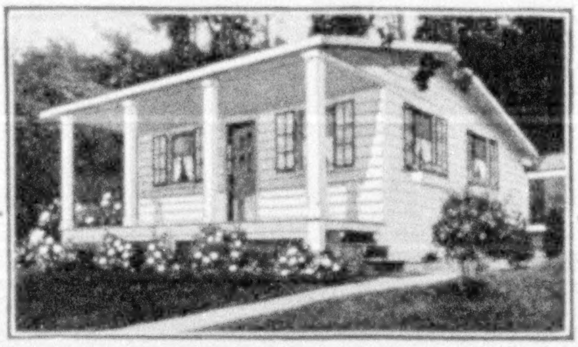

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Priced From $500 to $870

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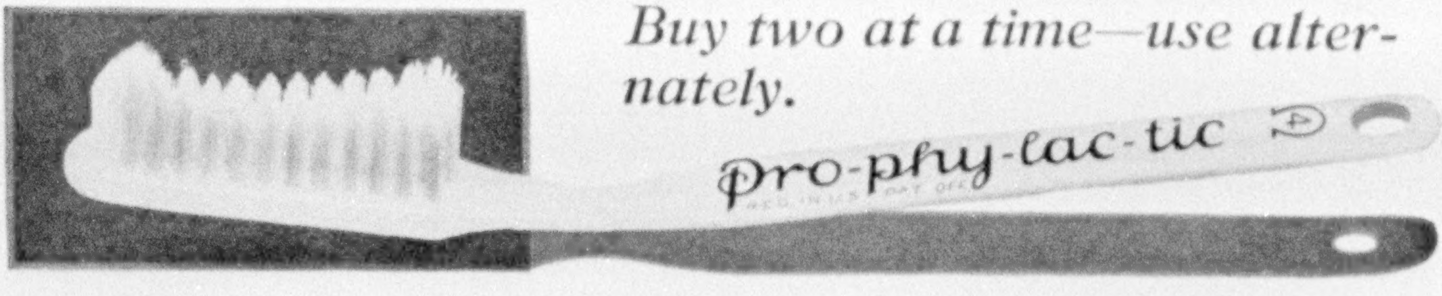

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Mail coupon below for further information and for a paper pattern showing the exact space requirements of this beautiful Baby Grand. The pattern will be mailed with our compliments.

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BABY GRAND

$650 *and up fob NY*

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Clips, 25 cents extra

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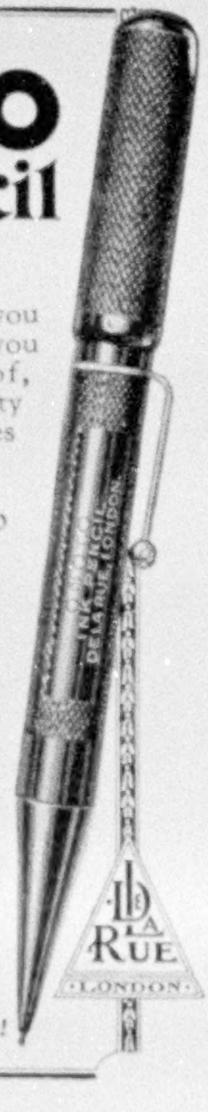

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Imported English Playing Cards of rare beauty and finish
No ink is quite so good as ONOTO Ink!

A Garden Full of Dahlias for $3.50

New and Rare Exhibition Dahlias

Few flowers, whether used for garden decoration or principally for cut blooms to decorate the home, are as responsive to simple garden culture as our Modern Dahlia. It has made wonderful advancement in size of bloom, habit of growth and profuse blooming qualities.

In order to further its now great popularity, we are offering this collection of

12 Dahlia Tubers for $3.50

—one each of 12 distinct varieties, not labeled, which if purchased separately according to name would cost not less than $10.

Order Your Tubers Now so as to have them ready to plant any time after the tenth of May or when all danger of frost is past.

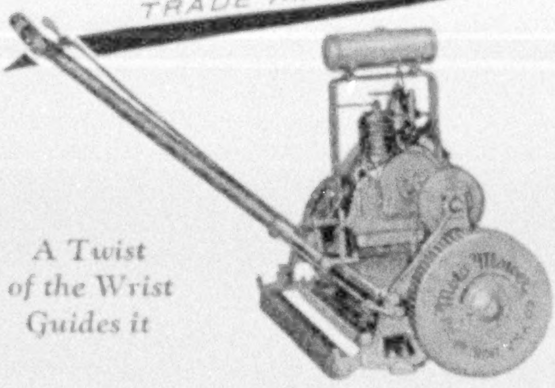
Mention this advertisement and send check, money order, cash, or stamps, and secure this exceptional collection, sent prepaid to any point in the U. S.

Our 1926 Spring Seed Annual sent on request.

Stumpp & Walter Co
30 and 32 Barclay Street New York

Moto-Mower

TRADE MARK



A Twist
of the Wrist
Guides it

A Real Grass Cutter

The Moto-Mower will give you a nice clean job. It is fast, powerful, simple and "fool-proof." Controlled by two handle-grips. A twist will start, stop or turn it in any direction—on its own power. Cuts close to trees and flower beds. Send for our latest catalog—today.

THE MOTO-MOWER COMPANY
3244 E. Woodbridge St. Detroit, Mich.

Banish this unpleasant duty

No need to scour or scrub the toilet bowl. Sani-Flush relieves you of the labor.

Sani-Flush, simply sprinkled into the bowl as directed, does away with all incrustations, stains, sediment and foul odors. It leaves the bowl glistening white.

Sani-Flush is scientifically prepared to do a perfect job. It cannot harm plumbing connections. Keep a can of Sani-Flush in the bathroom always.

Buy Sani-Flush at your grocery, drug or hardware store, or send 25c for a full-size can. 30c in Far West. 35c in Canada.

Sani-Flush
Reg. U.S. Pat. Off.
Cleans Closet Bowls Without Scouring

THE HYGIENIC PRODUCTS CO., Canton, Ohio

Clark's Famous Cruises
BY CUNARD LINE BIG NEW OIL-BURNERS
53 DAYS, $550 to $1250
Rates include hotels, drives, guides, and fees.

NORWAY AND WESTERN MEDITERRANEAN
ss "LANCASTRIA" JUNE 30

Includes Lisbon, Spain, Tangier, Algiers, Italy, Riviera, Sweden, Norway Fjords, Scotland, Berlin (Paris, London), repeating last summer's greatest cruise success.

Jan. 19 Round the World Cruise, 4 mos, $1250 to $2900.
Jan. 29 Mediterranean Cruise, 62 days, $600 to $1700.
Feb. 5 South America—Mediterranean Cruise, 86 days, $800 to $2300.

Please specify program desired.

FRANK C. CLARK, Times Bldg., N. Y.

Famous Outdoor Books

The Book of Birds — $3 postpaid
The Book of Fishes — $4 postpaid
Wild Flowers of America — $4 postpaid

Richly illustrated with natural color plates and engravings

(For foreign mailing add 25 cents)

NATIONAL GEOGRAPHIC SOCIETY
WASHINGTON, D. C.

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JUDD & DETWEILER, INC.
Master Printers

ECKINGTON PLACE AND FLORIDA AVENUE WASHINGTON, D. C

Whatever Your Question;—be it the pronunciation of **Fascista**, the spelling of a puzzling word, the location of **Esthonia** the meaning of **soviet, realtor, vitamin**, etc., this Supreme Authority—

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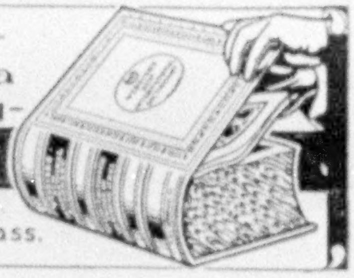

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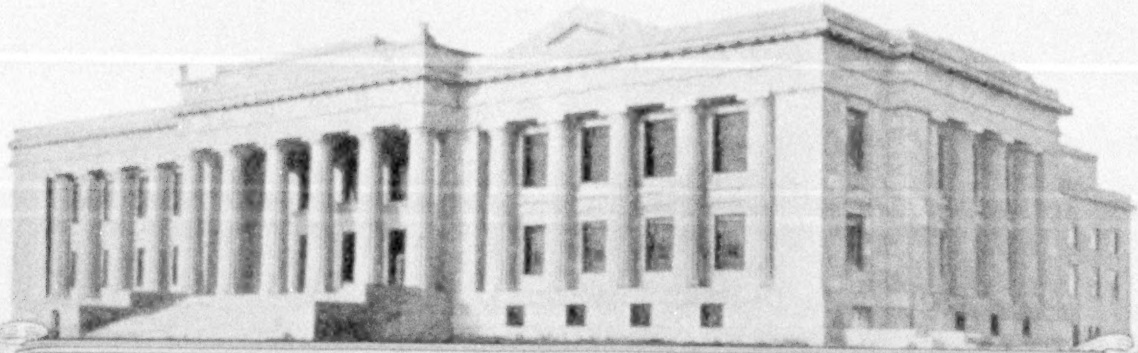
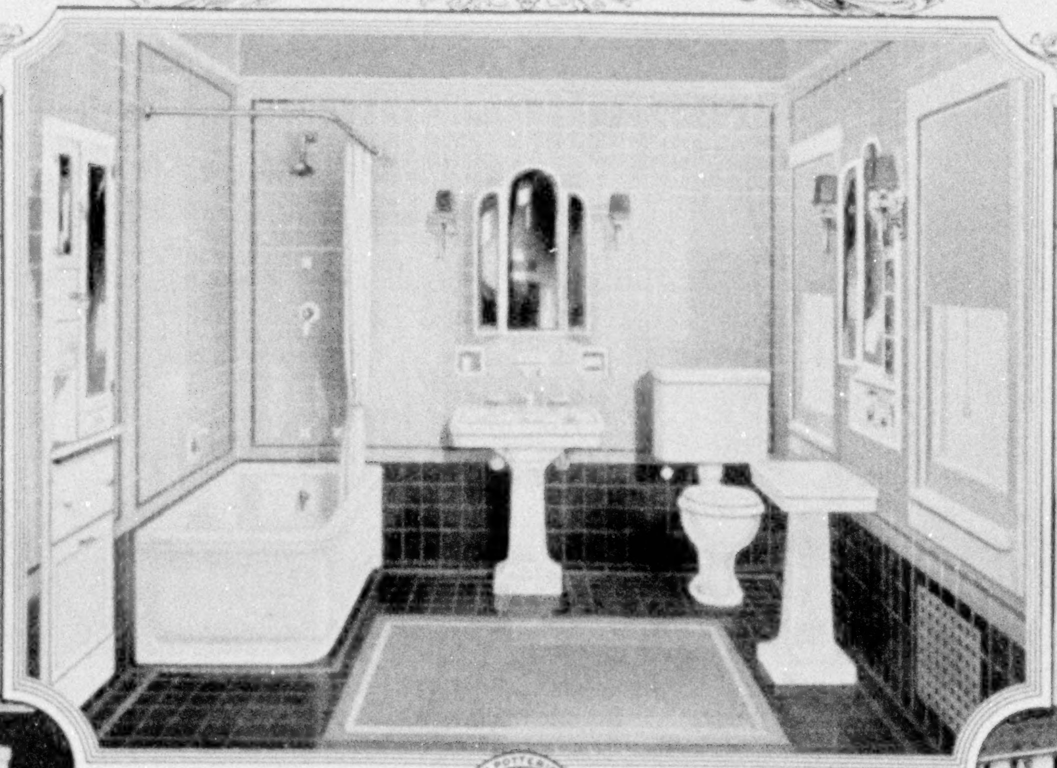


TE-PE-CO
ALL-CLAY PLUMBING FIXTURES



TEPECO

The building at the top of page is the Scottish Rite Cathedral of Guthrie, Okla. Hawk & Parr, Architects. Wolff Company furnished the plumbing supplies and Jas. Steward Co. were the plumbing contractors. It is equipped with Te-pe-co All-Clay Plumbing Fixtures. The bathroom shown is a typical plan for residential service.

THE bathroom is the temple of that virtue which is accounted next to godliness. Surely, its appointments should be as perfect as any in the home.

Te-pe-co All-Clay Plumbing Fixtures represent a harmonious combination of the practical with the utmost of lasting beauty. From the utilitarian standpoint they offer the latest advances in scientific sanitation. The artistry of their design, apparent even in the illustration, is all that can be desired.

There are expensive Te-pe-co fixtures and those moderately priced. But every Te-pe-co is identical in quality of materials, workmanship and finish.

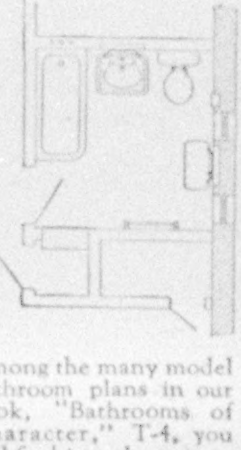
Write for literature.

THE TRENTON POTTERIES CO.

Trenton, New Jersey, U.S.A.

New York Philadelphia Boston San Francisco

World's Largest Makers of All-Clay Plumbing Fixtures



Among the many model bathroom plans in our book, "Bathrooms of Character," T-4, you will find just the one to fit the space at your disposal. Send 10 cents for your copy.

Krementz correct evening jewelry

Not Every Man Knows

THE man with whom the wearing of evening clothes is not an every-day affair is sometimes at a loss to know what is correct for the occasion. For his jewelry let him remember that this is the recognized form: *the vest buttons must always match the studs and links.* This is absolutely essential for tuxedo or full dress wear. A point to bear in mind when purchasing evening jewelry for a gift.

Krementz jewelry is correct for evening wear. Not only is it stylish in design but it looks well. Its quality is apparent. Authorities acknowledge it as standard. Most of the better dealers carry Krementz evening jewelry exclusively.

A copy of our new booklet with correct dress chart is waiting for you. Write for it!

KREMENTZ & COMPANY
Newark, New Jersey

This link shows the design of Full Dress Set illustrated—No. 2185. White Mother-of-Pearl centers, Rolled Platinum Rims. Set consists of pair of links, 3 studs, 4 vest buttons. Price, complete, $20.

Buying a Brush? Buy a Good One!

The handle, ferrule, and labor in a cheap brush cost as much as in a good brush. The big difference is in the bristles. The life of a brush is in the quality of its bristles and the way they are fastened.

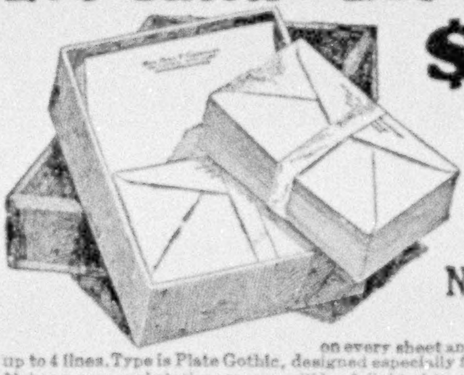
Buy a good one!

WHITING-ADAMS BRUSHES

Send for Illustrated Literature

JOHN L. WHITING-J. J. ADAMS CO.
BOSTON, U. S. A.
Brush Manufacturers for Over 116 Years and the Largest in the World

200 Sheets—100 Envelopes



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Name and Address Printed Free on every sheet and envelope in rich dark blue, up to 4 lines. Type is Plate Gothic, designed especially for clearness and good taste. Makes a personal stationery you will be delighted to use. An ideal gift with your friend's name. Attractive 3 letter monogram if preferred.

Just send $1.00 (west of Denver and outside U. S., $1.10) and this generous supply of stationery will come by return mail, postage prepaid. Securely packed in a sturdy blue box. Please write or print clearly. Prompt service and satisfaction guaranteed. Money refunded if you are not pleased in every way. Order today!

National Stationery Co., 1555 Lincoln Highway, Batavia, Illinois

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Moore Push-Pins
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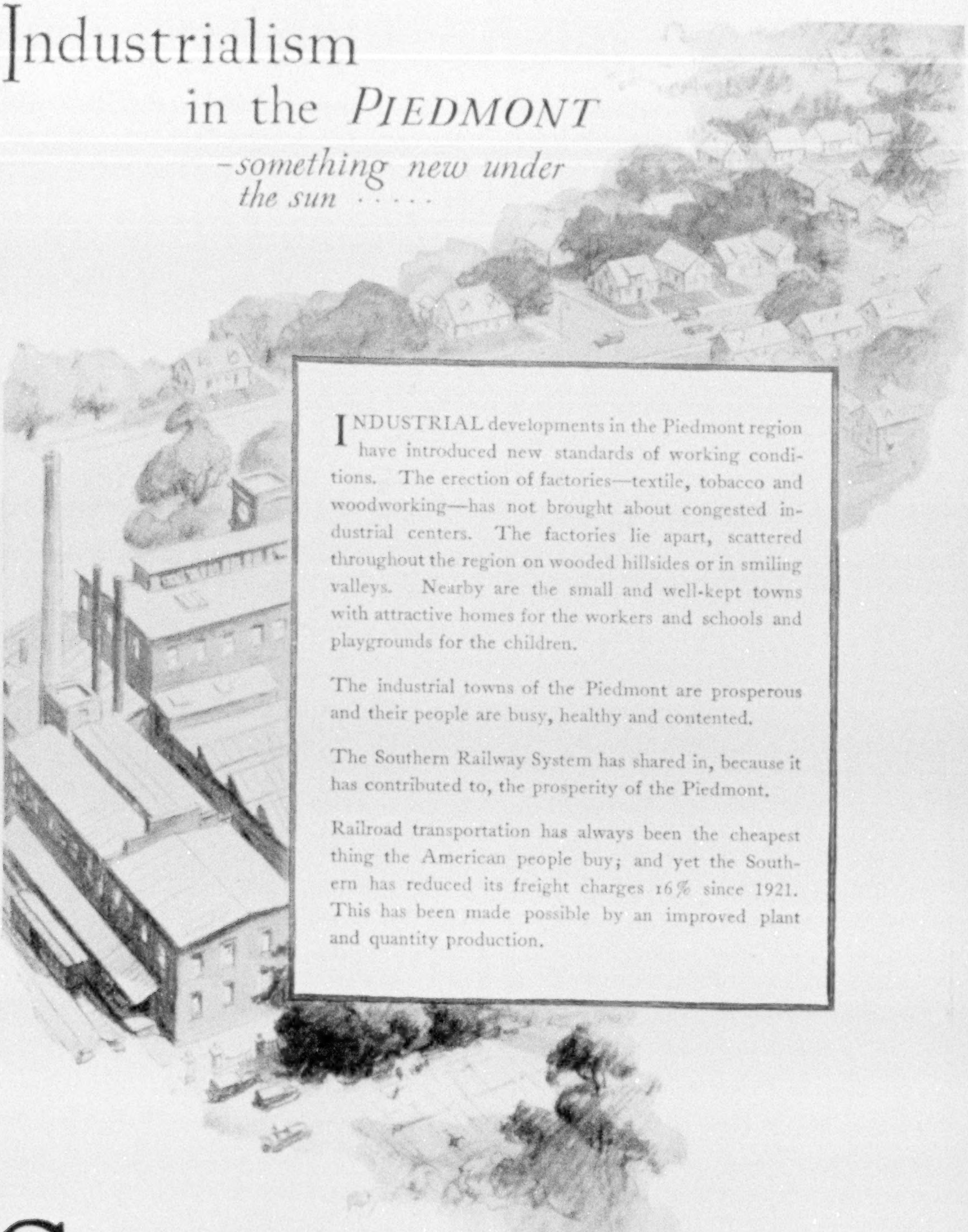
Industrialism in the *PIEDMONT*

—something new under the sun . . . . .



INDUSTRIAL developments in the Piedmont region have introduced new standards of working conditions. The erection of factories—textile, tobacco and woodworking—has not brought about congested industrial centers. The factories lie apart, scattered throughout the region on wooded hillsides or in smiling valleys. Nearby are the small and well-kept towns with attractive homes for the workers and schools and playgrounds for the children.

The industrial towns of the Piedmont are prosperous and their people are busy, healthy and contented.

The Southern Railway System has shared in, because it has contributed to, the prosperity of the Piedmont.

Railroad transportation has always been the cheapest thing the American people buy; and yet the Southern has reduced its freight charges 16% since 1921. This has been made possible by an improved plant and quantity production.

SOUTHERN

RAILWAY *SYSTEM*

THE SOUTHERN SR SERVES THE SOUTH

The Southern serves the South

COLORADO

Where Forests End—Timberline
Rocky Mountain National Park

America's Most Enchanting Scenic Summer Playground

offers the visitor unbounded opportunity to realize vacation dreams in a climate where pleasant, sunny days and cool, comfortable nights make life worth living.

ROCKY MOUNTAIN NATIONAL PARK, only four hours from Denver—the most inspiring mountain retreat in the world—gives visitors a never-to-be-forgotten thrill of joy and happiness.

MESA VERDE NATIONAL PARK—the Cliff Dweller Ruins—is the cradle of Ancient American Civilization.

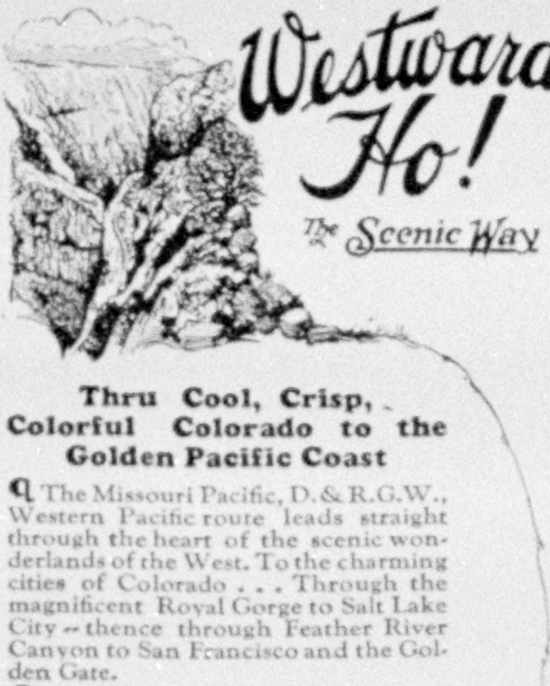
DENVER'S MOUNTAIN PARKS—the largest and most inspiring municipally-owned park system in America—the Moffat Road Trip to the Top o' the World, famous Georgetown Loop, the Royal Gorge and sixty other short trips, by rail and auto, into fifteen National Forests with 500 lakes, 6,000 miles of fishing streams and over 8,000 miles of scenic auto highways, thru pine-clad canyons and over mountain passes flanked by majestic snow-capped peaks touching cloudland.

WRITE FOR FREE BOOKLET

It tells "Where to Go" and "How to Enjoy the Scenic Wonderland of Cool Colorado."

TOURIST AND PUBLICITY BUREAU, Denver Chamber of Commerce
514 Seventeenth St., Denver, Colo.

The Vista on Lookout Mountain
in Denver's Mountain Parks



Westward Ho!

The Scenic Way

Thru Cool, Crisp, Colorful Colorado to the Golden Pacific Coast

¶ The Missouri Pacific, D. & R.G.W., Western Pacific route leads straight through the heart of the scenic wonderlands of the West. To the charming cities of Colorado . . . Through the magnificent Royal Gorge to Salt Lake City—thence through Feather River Canyon to San Francisco and the Golden Gate.

¶ You may choose any section of the West, or combine all in a *grand tour.*

¶ Special round-trip tourist fares. Stop-over anywhere en route—either way.

¶ Write for descriptive literature. Ask for booklet G-1.

C. L. Stone
Pass'r Traf. Mgr.
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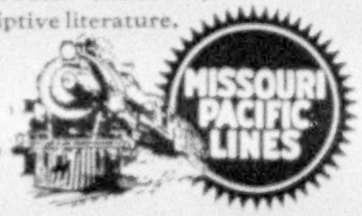
St. Louis, Mo.



Fast, Thru, Daily Service

Saguenay River

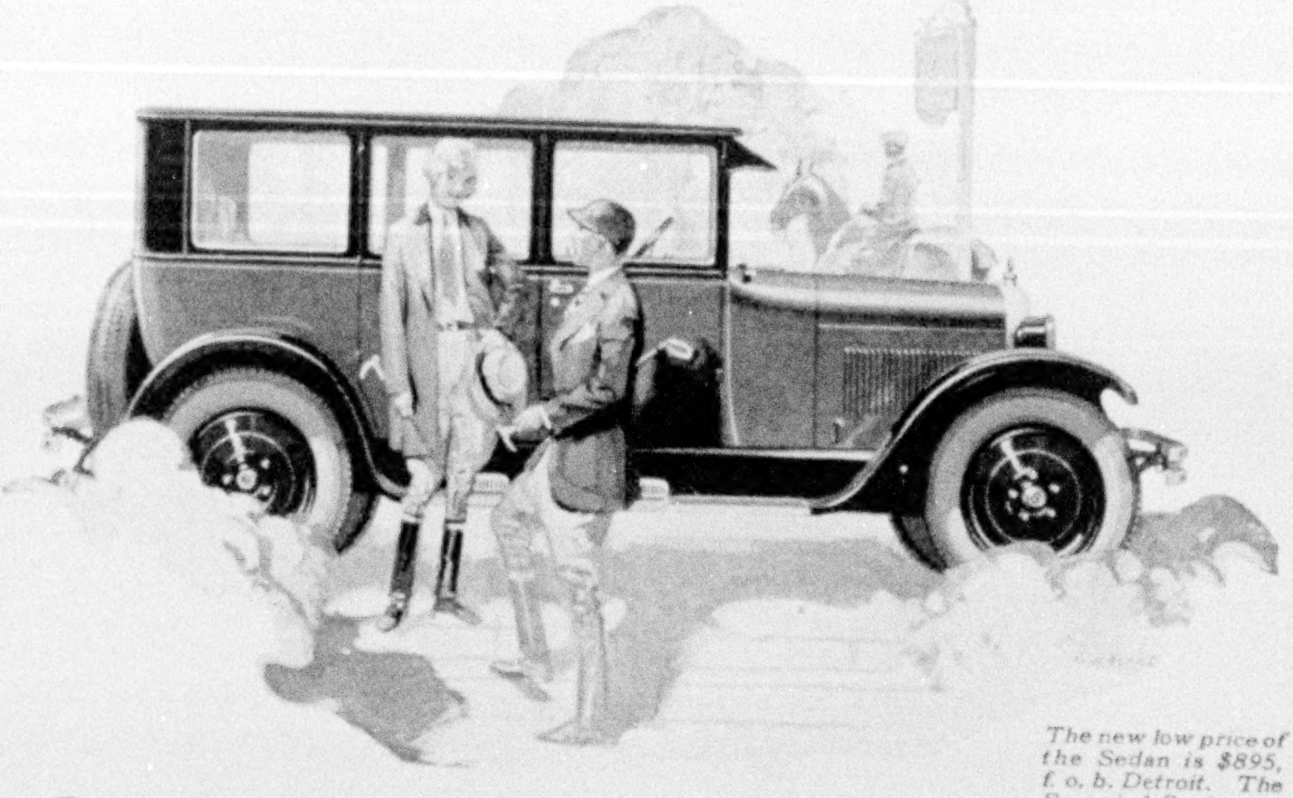
"Niagara to the Sea"

The all-water trip from Montreal to old Quebec, and on through the glorious Saguenay, is an experience unforgettable. From the deck of luxurious steamships of the Canada Steamship Lines, this region of romance and adventure is yours to rediscover.

You can begin your journey at Niagara Falls, Toronto, Rochester, Alexandria Bay, Clayton, Montreal, or Quebec, and return the same way.

Rates and Information from Canada Steamship Lines Offices: New York, 110 West 42nd St.; Boston, 216 Old South Bldg.; Philadelphia, 1343 Walnut St.; Chicago, 112 W. Adams St.; Detroit, 312 Dime Bank Bldg.; Cleveland, 945 Union Trust Bldg.; or JOHN F. PIERCE, Pass. Traffic Mgr., 107 C. S. L. Bldg., Montreal, Canada.

CANADA STEAMSHIP LINES



The new low price of the Sedan is $895, f. o. b. Detroit. The Special Sedan is $945, f. o. b. Detroit.

Strength and Safety

Dodge Brothers Motor Cars are built to protect passengers.

That is why Dodge Brothers pioneered in introducing the all steel body, and why they have continued to pioneer by recently improving and perfecting it.

Like the all steel sleeping car—now insisted upon by public opinion—Dodge Brothers all steel bodies are fireproof and as near shock-proof as motor car bodies can be built—an armor of protection in emergencies.

Electrically welded and staunchly braced and reinforced at all points of strain, they are noiseless and built to endure permanently.

They also provide unparalleled vision. The menace of thick corner pillars—blocking the driver's vision at street intersections—is eliminated. Slim, steel pillars take their place.

One-piece windshields and exceptional window areas further increase driving vision and safety.

And while safety cannot be measured in dollars, it is gratifying to know that these improved steel bodies exact no penalty from the purchaser.

With production vastly increased, these and many other vital improvements were announced coincidently with the most attractive schedule of low prices in Dodge Brothers history.

DODGE BROTHERS, INC. DETROIT
DODGE BROTHERS (CANADA) LIMITED
TORONTO, ONTARIO

DODGE BROTHERS
MOTOR CARS

Never a part of new car equipment

GENERAL CORDS have never been sold as original factory equipment, yet thousands of new cars are delivered with Generals "all around". . . . the buyers having specified Generals.

When a dealer replaces standard equipment tires with General Cords he calls it a change-over, but this growing practice has a greater significance.

It reflects the enthusiastic confidence car owners have in General—a confidence backed by their extra dollars when they *order* General Cords on a new car.

You may not have experienced the many advantages of General, but just ask a user and you'll be introduced to a brand of enthusiasm seldom accorded any product.

Some will speak in glowing terms of unheard-of mileage. Some will talk of greater motor power and give you figures on fuel savings. Others will tell you the full meaning of low pressure. But the sum total of this favorable comment among users is the reason General enjoys the largest sales confined to voluntary purchasers of any tire on the market.

THE GENERAL TIRE AND RUBBER CO., AKRON, OHIO

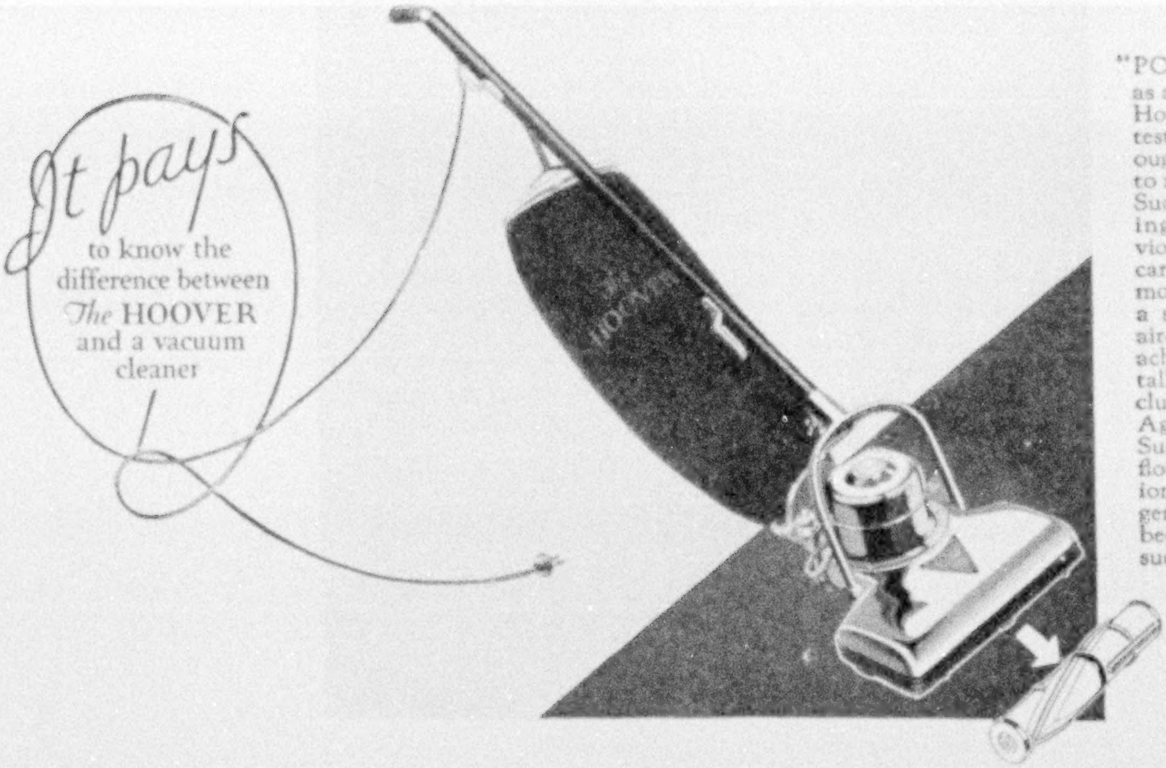
The Mark of Leading Tire Stores Everywhere

The GENERAL
CORD

—GOES A LONG WAY TO MAKE FRIENDS

"POSITIVE AGITATION"

See for yourself what it means



"POSITIVE AGITATION" as accomplished in the new Hoover is *beating*—the time-tested requirement of thorough rug-cleaning—reduced to an exact scientific process. Such beating, instead of being concentrated in a few violent strokes as with the carpet-beater or broom, is modified by The Hoover into a series of swiftly repeated air-cushioned taps. This is achieved by means of a totally new appliance—the exclusive and patented Hoover Agitator illustrated here. Suction lifts the rug from the floor and floats it on a cushion of air while the Agitator gently flutters out all the embedded grit as the strong suction draws all the dirt into the dust-tight bag

THE difference between the new Hoover and a vacuum cleaner is concrete and real. You have only to see this amazing cleaner in action on a carpet, and touch that carpet with the tips of your fingers, to know what this difference is.

Instantly your finger tips can *feel* the new Hoover's "Positive Agitation"—that delicate air-cushioned tapping of the fabric, that swiftly-sure dislodgment and withdrawal of the most deeply embedded grit.

Small wonder the new Hoover is hailed everywhere as revolutionary! It excels even the standard-design Hoover in these important particulars:

1 For the first time, it makes possible "Positive Agitation" of floor coverings.

2 By actual test, in the ordinary cleaning time, it beats out and sweeps up from carpetings an average of 131% more dirt.

3 It is an even greater rug-saver; the oftener a carpet is cleaned with a Hoover the longer that carpet will wear.

4 It is virtually service-proof, every part, including the new motor, requiring no oiling.

5 It increases the efficiency of its remarkable dusting tools because of its 50% stronger suction.

6 Its exclusive dust- and germ-proof bag is now washable.

7 Its form and finish are of startling beauty; and every new feature insures greater operating ease.

Examine the new Hoover. See for yourself what "Positive Agitation" means. And remember—only $6.25 down makes the new Hoover yours, with the balance in easy monthly payments.

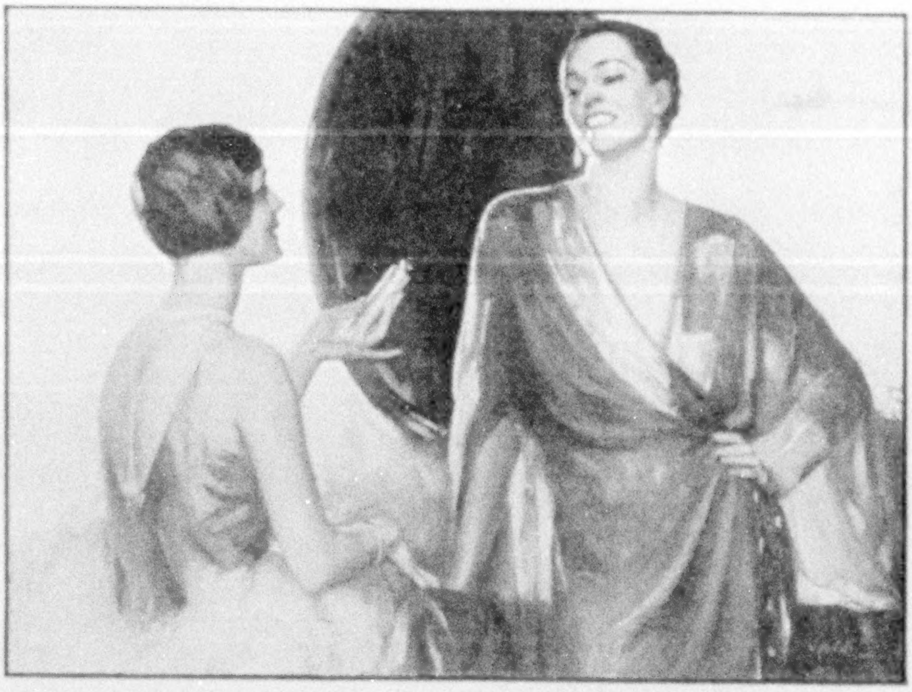
THE HOOVER COMPANY, NORTH CANTON, OHIO

The oldest and largest maker of electric cleaners • The Hoover is also made in Canada, at Hamilton, Ontario

The HOOVER

It BEATS as it Sweeps as it Cleans

PRESS OF JUDD & DETWEILER, INC.
WASHINGTON, D. C.



"How I Found Out
the Beauty Value of My Teeth"

"We were just talking—Tom and I—while waiting for the tea and things. I smiled my prettiest for him.

"'Speaking of teeth,' he said, which of course we weren't, 'yours are simply glorious.'

"'Hush, silly!' I said, but he knew I didn't mean it . . . and he didn't hush. I could have told him I'd used Colgate's all my life. But I don't see why we should tell men our beauty secrets, do you?"

* * *

Beautiful teeth are just as important to beauty as pretty eyes and a lovely complexion. From the standpoint of health they are a thousand times more important. When teeth are kept scrupulously clean, the germs and poisons of decay can't lurk and breed around them.

Colgate's will wash your teeth clean. It reaches all the hard-to-get-at places between the teeth and around the edges of the gums because of its penetrating action. Thus it *removes causes* of tooth decay.

Washes—Polishes—Protects

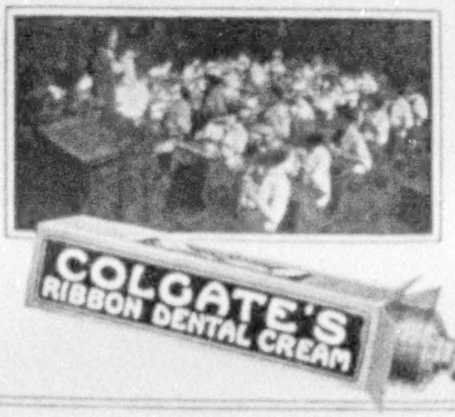
The principal ingredients of Colgate's are mild, tasteless soap and fine chalk, the two things that dental authorities say a safe dental cream should contain. The combined action of these ingredients washes, polishes and protects the delicate enamel of your teeth.

Just remember that beautiful, healthy teeth are more a matter of good care than of good luck. Use Colgate's after meals and at bedtime. It will keep your teeth clean and gloriously attractive.

And you'll like its taste . . . even children love to use it regularly.

Priced right, too! Large tube, 25c.

Here are children in Brooklyn, N. Y., learning to fight tooth decay. Colgate co-operates with thousands of school officials and health authorities in teaching dental hygiene.



This might have been prevented

Cancer Of The Mouth Caused By Bad Teeth

Authorities Attribute Dread Disease to Conditions Simple Care Could Have Prevented

The most dreaded disease of humanity — cancer of the mouth—can be the result of bad teeth. The American Society for the Control of Cancer charges abnormal tooth conditions with being the chief cause of this fearful affliction. Here is their emphatic statement in the Bulletin, VI, No. 12:

"People who will not attend to their teeth, by periodical visits to the dentist or the dental clinic, and by daily brushing of the teeth, should know that they, and almost no others, suffer and die from cancer of the mouth region. . . . Too much emphasis cannot be laid on the fact that the prevention of cancer in the mouth rests largely with the individual himself, and is to be accomplished first by the maintenance of cleanliness of the mouth and teeth, and secondly by the prompt seeking of competent medical advice."

These statements prove how extremely dangerous it is to let the poisons and germs of tooth decay linger in the mouth. A small cavity . . . the presence in your mouth of insidious poisons . . . and in the end your health shattered.

Be safe; don't let decay start. Fight it with every means that science can command!

Give yourself a chance!

Special Trial Tube Offer

COLGATE & CO., Dept. 771
581 Fifth Ave., New York City

I enclose two cents in stamps. Please send me a generous trial tube of Ribbon Dental Cream.

Name ________________

Address ________________

(In Canada, 72 St. Ambroise St., Montreal.)